

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
POWER COMPANY FOR (1) A GENERAL)	
ADJUSTMENT OF ITS RATES FOR ELECTRIC)	
SERVICE; (2) APPROVAL OF TARIFFS AND)	
RIDERS; (3) APPROVAL OF ACCOUNTING	)	CASE NO.
PRACTICES TO ESTABLISH REGULATORY	)	2020-00174
ASSETS AND LIABILITIES; (4) APPROVAL OF)	
A CERTIFICATE OF PUBLIC CONVENIENCE)	
AND NECESSITY; AND (5) ALL OTHER)	
REQUIRED APPROVALS AND RELIEF)	

ORDER

On July 15, 2020, Kentucky Power Company (Kentucky Power) filed¹ its application for approval of an increase in its electric revenues by \$70,096,743, or 13.16 percent; a Certificate of Public Convenience and Necessity (CPCN) to purchase and install an advanced metering infrastructure (AMI) system; new and revised tariffs; and approval of regulatory assets and liabilities. Kentucky Power proposed to offset the first year of the rate increase by ending Tariff Capacity Charge (Capacity Charge) two years early, conditioned upon the Commission approving the entirety of the application as filed, and by using a portion of the unprotected excess accumulated deferred income tax (ADIT) to offset the first year of the rate increase.

To determine the reasonableness of these requests, the Commission entered an Order on July 14, 2020, pursuant to KRS 278.190(2), suspending the proposed rates for

¹ Kentucky Power tendered its application on June 26, 2020. By letter dated July 1, 2020, Kentucky Power was notified that its application was rejected for filing due to certain filing deficiencies, which were subsequently cured. Kentucky Power's application was deemed filed as of July 15, 2020.

five months from their effective date of August 14, 2020, up to and including January 13, 2021.

The following parties requested and were granted full intervention: the Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General); Kentucky Industrial Utility Customers, Inc. (KIUC); Walmart Inc. (Walmart); Kentucky Solar Industries Association, Inc. (KYSEIA); Mountain Association for Community Economic Development,² Kentuckians for the Commonwealth, and Kentucky Solar Energy Society (collectively, Joint Intervenors); SWVA Kentucky, LLC (SWVA); and Sierra Club. The Attorney General and KIUC (collectively, Attorney General/KIUC) entered into an agreement to jointly sponsor certain discovery requests and witness testimony.

By Order entered on July 14, 2020, the Commission established a procedural schedule that provided for discovery, intervenor testimony, rebuttal testimony from Kentucky Power, a formal evidentiary hearing, and an opportunity for the parties to file post-hearing briefs. Informal conferences were held on October 21, 2020, and October 30, 2020, to discuss the possible resolution of pending issues, but did not result in a settlement agreement. Public meetings on the application were held, with two meetings on November 13, 2020, and one meeting on November 16, 2020.

An evidentiary hearing was held on November 17-20 and 23-24, 2020. Kentucky Power filed a response to post-hearing requests for information. On December 8, 2020, Kentucky Power filed a post-hearing brief. On December 14, 2020, the Attorney General, KIUC, Walmart, KYSEIA, Joint Intervenors, SWVA, and Sierra Club filed their respective

² During the pendency of this proceeding, Mountain Association for Community Economic Development changed its name to "Mountain Association."

post-hearing response briefs. On December 17, 2020, Kentucky Power filed its post-hearing reply brief. The matter now stands submitted to the Commission for a decision.

LEGAL STANDARD

Kentucky Power filed its application pursuant to KRS 278.180; KRS 278.190; KRS 278.22; 807 KAR 5:001, Sections 14-16; 807 KAR 5:011; and 807 KAR 5:051. The Commission's standard of review of a utility's request for a rate increase is well established. In accordance with statutory and case law, Kentucky Power is allowed to charge its customers "only 'fair, just, and reasonable rates.'"³ Further, Kentucky Power bears the burden of proof to show that the proposed rate increase is just and reasonable, under KRS 278.190(3).

TEST PERIOD

Kentucky Power proposed the 12-month period ending March 31, 2020, as the test period for determining the reasonableness of its proposed rates. None of the Intervenors contested the use of this period as the test period.

The Commission finds that it is reasonable to use the 12-month period ending March 31, 2020, as the test period in this case because, due to the timing of Kentucky Power's filing, the 12-month period ending March 31, 2020, is the most recent feasible period to use for setting rates. Further, except for the adjustments approved in this Order, the revenues and expenses incurred during that period are neither unusual nor

³ KRS 278.030; and *Pub. Serv. Comm'n v. Com. ex rel. Conway*, 324 S.W.3d 373, 377 (Ky. 2010).

extraordinary. In using this historic test period, the Commission gave full consideration to appropriate known and measurable changes.⁴

VALUATION METHOD

Pursuant to KRS 278.290(1), the Commission is empowered to “ascertain and fix the value of the whole or any part of the property of any utility,” and in doing so is given guidance by the legislature “in establishing value of utility property in connection with rates.”⁵ The legislature’s guidance requires the Commission “give due consideration” to a number of factors, including capital structure, original cost and “other elements of value recognized by law” in order to ascertain the value of any property under KRS 278.290 “for rate-making purposes.”⁶ In its application, Kentucky Power proposed to use the capitalization method to calculate its revenue requirement and required increase. The Attorney General/KIUC and their joint witness, Lane Kollen, argued that the more appropriate method to calculate Kentucky Power’s revenue requirement was to utilize a rate base calculation.⁷ As support for his argument, Mr. Kollen stated that the use of rate base is a more precise and accurate method to calculate a utility’s revenue requirement when compared to the capitalization method, because it allows the Commission to specifically review, assess, and quantify each of the costs that will earn a return.⁸

⁴ See, 807 KAR 5:001, Section 16(1)(a)(1). See also *Public Service Comm’n v. Continental Telephone Co. of Ky.*, 692 S.W.2d 794, 799 (Ky. 1985) (“There is also a provision for an adjustment because of known and measurable changes outside the test year.”).

⁵ *National Southwire Aluminum Co. v. Big Rivers Elec.*, 785 S.W.2d 503, 512 (Ky. App. 1990).

⁶ *Id.*

⁷ Attorney General/KIUC Post-Hearing Brief at 7.

⁸ Direct Testimony of Lane Kollen (Kollen Direct Testimony) at 10.

In general, the Commission must consider multiple factors when determining the reasonableness of a utility's request to use a capitalization or rate base calculation in determining the revenue requirement. A utility has the burden of demonstrating that its proposed method is the most reasonable, and the Commission is not bound by a utility's request to select one method over the other.

Based upon a review of the case record and being otherwise sufficiently advised, the Commission finds that applying the capitalization method to calculate Kentucky Power's revenue requirement is not reasonable because this method measures the capital allocations to Kentucky Power from its parent company, in excess of that needed to finance Kentucky Power's direct investment rate base as determined herein.⁹ In the converse, the rate base method measures the direct investment into Kentucky Power's system, and, under the facts presented here, is a more accurate method of measuring the financial health of Kentucky Power and its operations. For these reasons, the Commission finds that rate base methodology should be used to determine revenue requirement for this proceeding.

REVENUE REQUIREMENT ADJUSTMENTS

Kentucky Power proposed an annual increase in its electric revenues of \$70,096,743 using the Capitalization method to calculate its Overall Revenue Requirement. The only intervenor that supported testimony regarding specific revenue requirement adjustments was the Attorney General and KIUC, supporting the testimony of Mr. Lane Kollen. The table below shows adjustments both proposed by the Attorney General/KIUC and their witness, Lane Kollen, and those made by the Commission to

⁹ Application, Section V Schedule 4 and Section V, Workpaper S-2 at 1.

Kentucky Power's requested increase. Summaries of each issue and the findings of the Commission are explained in greater detail in the paragraphs that follow the table.

	KIUC/AG	Commission Adjustments	Difference
Kentucky Power Requested Increase			
Request Based On Original Filing	\$ 70,096,743	\$ 70,096,743	\$ -
Effects on Increase from Rate Base Recommendations			
Utilize Rate Base Instead of Capitalization to Reflect Return on Component for Base Rates	608,162	608,162	-
Reduce Cash Working Capital to '0' in Lieu of Lead/Lag Study	(1,660,444)	(1,660,444)	-
Remove Prepaid Pension and Prepaid OPEB from Rate Base, Net of ADIT	(5,203,831)	(5,203,831)	-
Remove Accounts Payable Balances from CWIP in Rate Base	(687,079)	(687,079)	-
Remove Accounts Payable Balances from Prepayments in Rate Base	(6,784)	(6,784)	-
Effects on Increase from Operating Income Recommendations			
Increase to Base Revenue Due to Moving of Certain Non-Recurring Charges from Misc. Revenue	-	2,817,345	2,817,345
Addition of Pension and OPEB Expense Originally Removed from Cost of Service	-	3,712,668	3,712,668
Reduction of Savings Plan Contribution Expense	-	(1,684,045)	(1,684,045)
Adjustment to Rate Case Expense	-	(418,069)	(418,069)
Remove Incentive Compensation Expense Tied to Financial Performance	(5,665,765)	(5,665,765)	-
Remove SERP Expense	(205,475)	(205,475)	-
Remove Kentucky Power's Pro Forma Adjustment to Restate Rockport UPA Operating Ratio	(1,705,844)	(1,705,844)	-
Restate State Income Tax Expense Based on Kentucky-Online Income Tax Rate of 5%	(692,374)	-	692,374
Remove EEI Dues for Covered Activities (Legislative and Regulatory Advocacy and Public Relations)	(48,360)	-	48,360
Remove Miscellaneous Expense Less EEI Dues for Covered Activities	-	(545,012)	(545,012)
Correct Allocation of Rockport UPA Deferral to Non-jurisdictional Customers	-	(211,280)	(211,280)
Remove SSC GreenHat Default Charges from FAC Base Rates	-	(16,552)	(16,552)
Effects on Increase from Rate of Return Recommendations			
Reallocate the Mitchell Coal Stock Adjustment Proportionately Across Capital Structure	(704,754)	-	704,754
Increase Short Term Debt and Set Debt Rate at 0.51%	(2,512,397)	-	2,512,397
Reduce Long Term Debt Rate to Reflect Refinance of June 2021 Maturity	(793,388)	(1,057,851)	(264,463)
Reduce Return on Equity from 10.0%	(7,576,217)	(5,511,493)	2,064,724
Reduce Return on Equity for Environmental Surcharge to 9.1%	-	(236,063)	(236,063)
Total Adjustments to Company's Proposed TY Base RR	(26,854,550)	(17,677,411)	(9,177,139)
Net Increase to Base Rates	<u>\$ 43,242,193</u>	<u>\$ 52,419,332</u>	<u>\$ 9,177,139</u>

Rate Base Adjustments

Adjustment to Return on Component for Base Rates to Reflect Calculation Utilizing Rate Base. As a result of his proposal to change the valuation method from capitalization to rate base as described above, Mr. Kollen also proposed to make an adjustment to increase the revenue requirement by \$608,162¹⁰ to reflect the return on the difference between the two valuation methods of \$7,488,735. Because the Commission finds that utilizing rate base is the most appropriate method of calculating the revenue requirement in this case, the Commission additionally finds that the adjustment proposed by Mr. Kollen

¹⁰ Kollen Direct Testimony at 7.

is reasonable and necessary to reflect the increased return on the difference between rate base and capitalization. This adjustment is reflected in the above table.

Cash Working Capital (CWC). In its application, Kentucky Power calculated a CWC component in its calculation of rate base in the amount of \$20,446,234.¹¹ The Attorney General/KIUC, based upon the testimony of Mr. Kollen, proposed that an adjustment be made to rate base to reduce Kentucky Power's CWC component to \$0, which resulted in a total reduction to the revenue requirement of \$1,660,444.¹² As support for his proposal, Mr. Kollen argued that the use of the one-eighth Operation & Maintenance (O&M) expense formula employed by Kentucky Power overstates the amount of CWC funds required because it is directly tied to the level of O&M expense, and ignores the actual level of investment made by the utility or its customers.¹³ Mr. Kollen further argued that Kentucky Power sells its receivables, and therefore the lag between conversion of receivables into cash is significantly reduced.¹⁴

In response, Kentucky Power asserted that there is no statutory requirement to perform a lead/lag study, a lead/lag study is not necessary under capitalization methodology, and that Mr. Kollen's arguments contain "unsupported speculation."¹⁵ Further, in response to discovery, Kentucky Power contended that there are several reasonable methodologies to determine CWC, including the one-eighth O&M expense,

¹¹ Application, Section V, Exhibit 1 at 11.

¹² Kollen Direct Testimony at 12; and Attorney General/KIUC Post-Hearing Brief at 11.

¹³ Kollen Direct Testimony at 13.

¹⁴ *Id.* at 15.

¹⁵ Rebuttal Testimony of Alex E. Vaughan (Vaughan Rebuttal Testimony) at R5–R6; and Kentucky Power Post-Hearing Brief at 87.

and that a lead/lag study may be reasonable when rate base is used for the return on calculation, while Kentucky Power proposed to use capitalization methodology.¹⁶

As previously noted, the Commission, not Kentucky Power, retains the authority to determine the appropriate method for valuing utility property for ratemaking purposes. In order to help inform the Commission's determination of the appropriate value of utility property for ratemaking purposes, including the method to be used, the Commission promulgated certain regulations, including 807 KAR 5:001 Section 16(4)(h) and (i). For instance, 807 KAR 5:001 Section 16(4)(i) requires a "reconciliation of the rate base and capital used to determine [the utility's] revenue requirements." Although Kentucky Power correctly notes that a lead/lag study may not be necessary under the capitalization methodology, under Kentucky law the Commission determines the appropriate valuation methodology for ratemaking purposes. Because the Commission has determined net investment rate base is the appropriate measure of return in this matter, it must determine an appropriate amount of CWC to include in its valuation of utility property for ratemaking purposes. The Commission notes that there is compelling evidence that, because Kentucky Power sells its receivables it is likely that Kentucky Power does not finance CWC on behalf of its customers. Although this could be determined with absolute certainty, Kentucky Power has refused to conduct a lead/lag study, either before the case in an attempt to meet its burden of proof, or during this matter in response to discovery requests. The results of a lead lag study could offer a negative result in the calculation of Kentucky Power's required CWC. Taking into consideration the evidence at hand,

¹⁶ Kentucky Power's Response to the Attorney General's/KIUC's Second Request for Information (Attorney General/KIUC's Second Request), Item 9.

including Kentucky Power's unwillingness to conduct a lead/lag study in support of its CWC adjustment, in accordance with precedent the Commission finds that CWC should be reduced to \$0, and the resulting adjustment to the revenue requirement is a reduction of \$1,660,444.¹⁷ Furthermore, the Commission finds that Kentucky Power shall be required to submit a lead/lag study in all general rate cases its files, until further notice. The expenses incurred in conducting lead/lag studies for future general adjustment in rates matters will be reviewed for recovery in each case as rate case expense.

Prepaid Pension and Prepaid Other Post-Employment Benefits (OPEB) included in Rate Base. The Attorney General/KIUC and Mr. Kollen proposed a reduction to the revenue requirement in the amount of \$5,203,831 to reduce prepaid pension and prepaid OPEB assets that were included in Kentucky Power's rate base calculation.¹⁸ Mr. Kollen argued that Kentucky Power does not finance these assets and therefore they should not be included in the calculation of rate base.¹⁹ In response, Kentucky Power argued that there is a cash outlay to finance these assets and therefore should be included in the calculation of rate base.²⁰

While the Commission acknowledges Kentucky Power's assertion that there has been cash outlay to finance these prepaid assets as demonstrated in Ms. Whitney's rebuttal testimony and supporting exhibits, the Commission finds that a more reasonable

¹⁷ Case No. 2019-00271, *Electronic Application of Duke Energy Kentucky, Inc. for 1) An Adjustment of the Electric Rates; 2) Approval of New Tariffs; 3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 4) All Other Required Approvals and Relief* (Ky. PSC Apr. 27, 2020), Order at 6-7.

¹⁸ Kollen Direct Testimony at 18–22; Attorney General/KIUC Post-Hearing Brief at 12.

¹⁹ Kollen Direct Testimony at 21.

²⁰ Rebuttal Testimony of Heather M. Whitney (Whitney Rebuttal Testimony) at 4-5.

method of measuring and recording Kentucky Power's pension and OPEB amounts for ratemaking purposes would be to remove the expenses attributed to these amounts for the test period because it reflects the actual amounts expended for pensions and OPEB expenses in the test period, rather than an expected future liability. As a result of this finding, the Commission reduced the revenue requirement by \$5,203,831 to reflect the removal of the prepaid pension and prepaid OPEB asset and made a corresponding adjustment to increase expenses for Kentucky Power's applicable test-year pension and OPEB amounts as discussed in the Operating Income Adjustments section below.

Adjustments to Accounts Payable. Mr. Kollen, on behalf of the Attorney General/KIUC provided testimony proposing two additional adjustments to the revenue requirement for outstanding accounts payable related to construction work in progress (CWIP) and to prepayments in the amounts of \$687,079 and \$6,784 respectively.²¹ In rebuttal testimony, Kentucky Power did not provide contrary evidence or arguments against Mr. Kollen's proposed adjustments in the context of the calculation of rate base, but rather restated its position that Kentucky Power used capitalization in the calculation of its revenue requirement, thus making the adjustment unnecessary.²² Because the Commission finds that rate base is the more appropriate method to calculate the revenue requirement, and Kentucky Power provided no contrary evidence or objection against Mr. Kollen's proposal in the context of the calculation of rate base, the Commission finds that the adjustments proposed by Mr. Kollen are reasonable and should be accepted, and are reflected in the calculation of the revenue requirement.

²¹ Kollen Direct Testimony at 24.

²² Vaughan Rebuttal Testimony at R7.

Operating Income Adjustments

Certain Nonrecurring Charges. As discussed in the sections regarding the Delayed Payment Charge and Nonrecurring Charges, the Commission finds that certain Nonrecurring charges from Kentucky Power's tariff be removed. As a result, an increase to the Revenue Requirement for base rates that correspond with an equivalent decrease in miscellaneous revenues is necessary to ensure Kentucky Power is given the opportunity to recover the costs to perform utility service.

Pension and OPEB Expenses Removed from Cost of Service. As discussed in the preceding paragraphs regarding prepaid pension and prepaid OPEB assets that were included in rate base, Kentucky Power asserted that if the Commission adopted the Attorney General/KIUC's recommendations regarding the prepaid pension and prepaid OPEB assets and removed them from rate base, then a corresponding adjustment should be made to increase operating expenses to remove the benefit of the prepaid pension and prepaid OPEB asset that would normally reduce Kentucky Power's cost of service.

The Commission finds that Kentucky Power provided sufficient evidence that there is a certain amount of cost savings attributed to the amounts recorded as a prepaid asset on Kentucky Power's books, and that the effect of increased expenses by not including the prepaid assets in rate base should be adequately reflected in the cost of service. Therefore, the Commission increased operating expenses in the amount of \$3,712,668²³

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Annualized Pension and OPEB Costs Removed from Cost of Service	\$	3,690,184
Times: Gross Revenue Conversion Factor		<u>1.0060929</u>
Increase to Revenue Requirement	\$	<u>3,712,668</u>

to fully recognize the effects of the preceding adjustment to the prepaid Pension and prepaid OPEB assets.

Incentive Compensation and Stock-Based Compensation. Kentucky Power included \$4,467,190 of short-term incentive compensation plan (STI) costs and \$1,164,263 in long-term incentive compensation plan (LTIP) costs in its jurisdictional revenue requirement. These amounts reflect adjustments made by Kentucky Power to reduce test-year STI and LTIP costs by \$945,619 to normalize test-year levels to a 1.0 target amount.²⁴ During the test period, Kentucky Power's STI funding was divided into three metrics: earnings per share (EPS), safety and compliance measures, and strategic initiatives. For 2020, the annual STI plan funding is entirely based on EPS metrics.²⁵ Kentucky Power's LTIP funding and performance metrics are both tied to earnings criteria.

The Attorney General/KIUC's witness, Mr. Kollen, recommended an adjustment to eliminate \$5,665,765 of STI/LTIP costs from rate recovery. As support for the recommendation, Mr. Kollen asserted that the Commission historically disallowed and removed incentive compensation expenses that were incurred to incentivize the achievement of shareholder goals as measured by financial performance. As additional support, Mr. Kollen stated that in its most recent previous rate case proceeding, Kentucky Power elected to forego recovery of its incentive compensation expense in its settlement.²⁶

²⁴ Direct Testimony of Kimberly Kaiser (Kaiser Direct Testimony) at 6.

²⁵ Kentucky Power's Response to Commission Staff's Fourth Request for Information (Staff's Fourth Request), Item 24.

²⁶ Kollen Direct Testimony at 29.

In response, Kentucky Power argued that the Attorney General/KIUC's proposed adjustment is not warranted because although the goals to fund the STI plan are based on EPS metrics, the actual cost incurred by Kentucky Power is based primarily on performance goals.²⁷ Kentucky Power asserted that both STI and LTI incentivize employees to make efficient use of Kentucky Power's financial resources, and therefore benefits ratepayers.²⁸

Incentive compensation plans typically have funding metrics that must be achieved before eligible employees who meet performance metrics are awarded incentive compensation. If the funding metrics are not achieved, then no incentive plan compensation is paid. Relevant here, both funding and performance metrics include financial and nonfinancial objectives. In a few previous cases, the Commission distinguished between the funding and performance metrics, removing amounts for ratemaking purposes based on financial objectives in performance metrics only.²⁹ However, in other cases, we denied recovery of compensation in the form of restricted stock units tied to financial objectives in funding metrics.³⁰

²⁷ Rebuttal Testimony of Kimberly Kaiser (Kaiser Rebuttal Testimony) at R2–R3.

²⁸ Kentucky Power Post-Hearing Brief at 74.

²⁹ Case No. 2014-00396, *Application of Kentucky Power Company for: (1) A General Adjustment of Its Rates for Electric Service; (2) An Order Approving Its 2014 Environmental Compliance Plan; (3) An Order Approving Its Tariffs and Riders; and (4) An Order Granting All Other Required Approvals and Relief* (Ky. PSC June 22, 2015), Order at 25–26; and Case No. 2018-00358 *Electronic Application of Kentucky-American Water Company for an Adjustment of Rates* (Ky. PSC June 27, 2019), Order at 43–44.

³⁰ Case No. 2017-00321, *Electronic Application of Duke Energy Kentucky, Inc. for: 1) An Adjustment of the Electric Rates; 2) Approval of an Environmental Compliance Plan and Surcharge Mechanism; 3) Approval of New Tariffs; 4) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 5) All Other Required Approvals and Relief* (Ky. PSC May 23, 2018), Order at 5–6.

The Commission must address the inconsistent treatment of funding and performance metrics tied to financial objectives. The Commission disallows recovery costs for compensation tied to financial objectives, such as earnings growth or earning per shares, because shareholders, but not ratepayers, receive primary, if not exclusive, benefit from financial objectives in the form of higher return on their investment. Such costs are disallowed based upon Commission precedent that, unless a utility can establish by substantial evidence that financial objectives benefit the utility's ratepayers, ratepayers should not pay for expenses that primarily benefit shareholders.³¹

The Commission finds that both funding metrics and performance metrics based upon financial objectives should receive the same regulatory treatment because funding and performance metrics tied to financial objectives are equally shareholder oriented, while ratepayers receive little demonstrative benefit. Additionally, regardless of whether a utility meets the funding or performance measures, including the costs of the programs in rates, normalized or otherwise, ensures customers pay to fund the programs. If a utility meets the funding or performance measures shareholders primarily benefit, but if the metrics are missed, shareholders are still enriched with additional revenue with no corresponding expense. For those reasons, the Commission finds that incentive plan costs for funding metrics and performance metrics tied to financial objectives should be disallowed from recovery for ratemaking purposes absent a clear showing of benefit to ratepayers.

³¹ See Case No. 2014-00396, (Ky. PSC June 22, 2015) Order at 25–26; Case No. 2018-00358, (Ky. PSC June 27, 2019) Order at 43–44.

Based upon a review of the case record, the Commission finds that Kentucky Power offered conclusory statements but failed to establish by sufficient evidence that the portions of STI and LTIP funding and performance metrics tied to financial objectives provide ratepayer benefit. Therefore, the Commission finds that the STI and LTIP expenses tied to financial objectives, whether in funding metrics or performance metrics, should be disallowed for ratemaking purposes.

Consistent with this finding, the Commission reduced Kentucky Power's revenue requirement by \$5,665,765 to remove STI and LTIP expenses included in the test year.

Supplemental Executive Retirement Plan (SERP). In its application, Kentucky Power included \$0.006 million in Supplemental Executive Retirement Plan (SERP) expense for its employees and an additional \$0.199 million in affiliate charges for AEP Service Corporation (AEPSC).³²

Direct intervenor testimony and analysis regarding SERP expense was sponsored by the Attorney General/KIUC, and performed by Lane Kollen. Mr. Kollen proposed an adjustment to remove 100 percent of test-year SERP expenses³³ citing Commission precedent,³⁴ as well as stating that Kentucky Power's motion to recover SERP expenses in this proceeding is "an end-run around the Commission's prohibition against recovery of excessive expenses incurred pursuant to multiple retirement plans."³⁵ Mr. Kollen then stated that the Commission's historical practice of excluding expenses for multiple

³² Kollen Direct Testimony at 31.

³³ *Id.* at 33.

³⁴ *Id.* at 32.

³⁵ *Id.*

retirement programs is of even more crucial importance for SERP because it is available only to highly-compensated executives.³⁶

In rebuttal testimony, Kentucky Power asserted that SERP expenses should not be excluded for ratemaking, claiming that the non-qualified deferred compensation benefits have been designed as a part of a market competitive total rewards package, specifically for those employees who have skills and experience that command a higher level of compensation.³⁷

In Case No. 2017-00179, Kentucky Power's SERP expense was included in the non-unanimous settlement revenue requirement.³⁸ In deference to the settlement, the Commission allowed recovery of the SERP expense. However, the Commission typically disallows SERP costs when retirement plan expenses offered exclusively to certain highly-compensated employees exceed the cost of pension plans for all employees because, absent substantial evidence to the contrary, retirement plans that benefit highly-compensated employees without providing a benefit to ratepayers are the type of costs the Commission finds should not be borne by ratepayers.³⁹

³⁶ *Id.*

³⁷ Kaiser Rebuttal Testimony at R13–R14.

³⁸ Case No. 2017-00179, *Electronic Application of Kentucky Power Company for (1) A General Adjustment of Its Rates for Electric Service; (2) Approval of Tariffs and Riders; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) All Other Required Approvals and Relief* (Ky. PSC Jan. 18, 2018), Order at 16.

³⁹ See Case No. 90-158, *Adjustment of Gas and Electric Rates of Louisville Gas and Electric Company* (Ky. PSC Dec. 21, 1990), Order at 27; Case No. 94-355, *Application of Cincinnati Bell Telephone Company for Authority to Increase and Adjust Its Rates and Charges and to Change Regulations and Practices Affecting Same* (Ky. PSC May 23, 1995), Order at 16; Case No. 2016-00169, *Application of Cumberland Valley Electric Inc. for a General Adjustment of Rates* (Ky. PSC Feb. 6, 2017), Order at 10.

The Commission is persuaded by the Attorney General/KIUC's argument that SERP expense should be disallowed. The Commission finds that Kentucky Power's SERP expenses should be disallowed for ratemaking purposes because Kentucky Power did not provide substantial evidence that its SERP benefits provide a quantitative benefit to ratepayers, and thus failed to establish that recovery of SERP costs is warranted under the facts of this case. For this reason, the Commission has reduced Kentucky Power's SERP expense for its employees by \$5,467 and \$198,807 in affiliate charges for AEPSC.

Savings Plan Expense. Kentucky Power included \$1,673,846⁴⁰ in its jurisdictional revenue requirement for savings plan expense for employees who participate in a defined benefit plan and have matching 401(k) contributions from Kentucky Power that totals to \$1,684,045 after applying the Gross Revenue Conversion Factor.⁴¹

None of the intervenors directly addressed Kentucky Power's savings plan expense.

Kentucky Power asserted that the cash balance formula pension contributions as well as 401(k) matching were designed together to provide a market competitive total benefit package, stating that each contribution alone would be less than what would be needed to constitute a market competitive benefit package.⁴² In addition, Kentucky Power

⁴⁰ Kentucky Power's Response to Commission Staff's Post-Hearing Request for Information (Staff's Post-Hearing Request), Item 3, Attachment 1.

⁴¹		
Adjusted Kentucky Jurisdictional Test Year Savings Plan Contributions		\$1,673,846
Times: Gross Revenue Conversion Factor		1.0060929
		<hr/>
Gross Adjusted Jurisdictional Contributions		\$1,684,045
		<hr/> <hr/>

⁴² Kentucky Power's Response to Commission Staff's Post-Hearing Request, Item 3.

cited the findings in the final Order in Case No. 2017-00179 in which the Commission recognized the Company's cash balance pension benefit was based on a "defined contribution" formula, rather than a traditional final average pay formula, as well as that participation in the Company's traditional final average pay pension formula was frozen in 2000 and that benefits from this formula were frozen in 2010.⁴³

First, the Commission notes that it made an erroneous finding of fact in its final Order in Case No. 2017-00179 because the Order referenced only the 401(k) contributions and a defined benefit plan that was locked and frozen, but was silent regarding a third retirement plan funded entirely by Kentucky Power in the form of the cash balance formula pension.⁴⁴ In Case No. 2017-00179 and in this proceeding, Kentucky Power testified that the contributions to the 401(k) and cash balance formula pension were designed so that, taken individually, the contributions are less than would be required to provide a market competitive retirement benefit, but, taken together, are market competitive.⁴⁵ However, the Commission finds that Kentucky Power has not provided substantial evidence to support this assertion. For this reason, the Commission has reduced jurisdictional 401(k) savings plan expense by \$1,684,045.

Rate Case Expense. In its application, Kentucky Power included an adjustment in the amount of \$527,792 for the amortization of rate case expenses that were estimated

⁴³ *Id.*

⁴⁴ Case No. 2017-00179, Jan. 18, 2018 Order at 15 and Dec. 7, 2017 Hearing Video Transcript (HVT) at 4:50:27.

⁴⁵ Kentucky Power Response to Staff's Post-Hearing Request, Item 3.a.

to total \$1,583,375.⁴⁶ Kentucky Power provided monthly updates reporting actual amounts expended for rate case expense during the course of this proceeding.⁴⁷ As of November 30, 2020, Kentucky Power's rate case expenses to date totaled \$391,375.⁴⁸ Of this amount, \$2,315 was related to meals, snacks, and beverages consumed by Kentucky Power and American Electric Power (AEP) employees during meetings, and \$51,117 was related to witness coaching provided by the Communication Counsel of America (CCA), for a total of \$54,612.⁴⁹

Kentucky Power has the burden of proof that its rate case expenses are just and reasonable. According to the invoices provided, the meal expenses that Kentucky Power asks ratepayers to cover include breakfasts, lunches, and hot beverages served in conjunction with meetings on or near the business premises.⁵⁰ Meal expenses incurred on or near the business premises are incurred for the convenience of Kentucky Power or AEP. Such expense is wholly different from meal expenses incurred by employees while away from their place of employment on business travel. The Commission finds that the recovery of expenses for meals, snacks, and beverages consumed by Kentucky Power and AEP employees during staff meetings are not just and reasonable and therefore should be denied. The Commission further finds that witness coaching provided by CCA

⁴⁶ Application, Section V, Exhibit 2 at 19.

⁴⁷ Kentucky Power's Response to Commission Staff's Second Request for Information (Staff's Second Request), Item 39.

⁴⁸ Kentucky Power's Dec. 10, 2020 Supplemental Response to Staff's Second Request, Item 39, Supplemental Attachment 1.

⁴⁹ *Id.*

⁵⁰ *See id.* at 16–25, which includes lunches for three Ashland, Kentucky-based Kentucky Power employees from Ashland, Kentucky restaurants; \$96.95 for hot beverages, \$370.51 for breakfast boxes, and \$391.95 for lunches delivered to AEP's offices in Columbus.

should be denied as unreasonable, and additionally is likely duplicative of witness preparation that Kentucky Power is billed for by Kentucky Power's counsel, if the expense and activity is necessary at all. Furthermore, recovering this expense from customers is patently unfair. Therefore, the cost of meals during meetings and the amounts paid to CCA should be removed for ratemaking purposes.

To factor in for the preceding, and to reflect the actual amount of rate case related work expensed to date, the Commission finds that a reduction to the revenue requirement in the amount of \$418,069⁵¹ is necessary and is reflected in the Commission's revenue requirement calculation above.

Edison Electric Institute (EEI) Expenses. Kentucky Power was allocated \$104,806 for dues to the EEI, a nonprofit trade association representing American investor-owned electric utilities.⁵² Of the total amount, \$88,361 was included in the cost of service and

51	
Total Rate Case Expenses to Date	\$ 391,375
Meals and Witness Coaching Provided by Communication Counsel of America	(54,612)
Estimated Rate Case Expenses in Application	<u>(1,583,375)</u>
Reduction Before Gross Up	(1,246,612)
Divide by: Three Years	<u>3</u>
Reduction to Amortization of Rate Case Expense	(415,537)
Gross Revenue Conversion Factor	<u>1.0060929</u>
Reduction to Revenue Requirement	<u>\$ (418,069)</u>

⁵² Rebuttal Testimony of Brian K. West (West Rebuttal Testimony) at R11; and Kentucky Power Response to Staff's Post-Hearing Request, Item 2, Attachment 1. AEP is billed and then allocates the expense to its operating company subsidiaries based upon each utilities number of customers and revenue.

\$16,445, representing legislation influencing activity, was excluded from the cost of service.⁵³

Attorney General/KIUC and Mr. Kollen recommended that 45.35 percent of the \$104,806 allocated to Kentucky Power, or \$48,000, be disallowed for ratemaking purposes, asserting that there is “no assurance” that the percentage removed for influencing legislation accurately incorporates all advocacy and public relations costs.⁵⁴

In response, Kentucky Power maintained that there is no evidence to support Attorney General/KIUC’s and Mr. Kollen’s recommendation, asserting that, consistent with the express language of the EEI bill, the appropriate amounts were excluded from the cost of service, and therefore no additional adjustment is warranted.

The Commission finds that through its responses to Staff’s Post-Hearing Request, Kentucky Power has properly explained what was excluded from the cost of service for ratemaking purposes and has provided additional information for the Commission to consider in rendering its decision on the reasonableness of the expense. Therefore, the Commission finds that the full amount of EEI Dues that have been included in the test year should be included in the calculation of Kentucky Power’s revenue requirement.

Miscellaneous Expenses. Kentucky Power included in its test-year expenses \$630,072 that were included in FERC Account 930, Miscellaneous Expense. In response to Staff’s Second Request, Item 47, Kentucky Power provided a spreadsheet that provided a breakdown of the expenses included in this category with some detail for

⁵³ *Id.*

⁵⁴ Kollen Direct Testimony at 37–38; Attorney General/KIUC Post-Hearing Brief at 25–27.

amounts expensed over \$500.⁵⁵ In Staff's Post-Hearing Data Request, the Commission asked Kentucky Power to provide the information in the record that showed support that the amounts expensed were reasonable. In its response, Kentucky Power stated that adjustments had been made to the test-year expenses after they were reviewed for reasonableness by Kentucky Power's witnesses Ms. Scott and Mr. Bishop. Kentucky Power additionally stated in its response that "to identify each expense (or category of expense) and provide testimony expressly supporting its recovery would be unworkable, unprecedented, and unreasonable."⁵⁶

The Commission finds that Kentucky Power has the burden of proof in this case to demonstrate that the expenses that it requests recovery of are reasonable. While the Commission can appreciate that requiring a utility, such as Kentucky Power, to provide written testimony on why each individual expense should be recovered, merely providing the Commission some indication of the purpose or benefit of the category of expenses in order for the Commission to determine the reasonableness of recovery would not be "unworkable, unprecedented, [or] unreasonable." In fact, other utilities in rate cases include at least the recipient of miscellaneous expenses incurred during a test-year or base period in its application or accompanying support. The Commission notes that when asked to provide information regarding a certain category of expenses, as has been done in this case, Kentucky Power has evidenced its inability, or unwillingness to do so. Therefore, the Commission finds that test year expenses be reduced by \$545,012 which excludes \$88,361 for EEI Dues as discussed above.

⁵⁵ Kentucky Power's Response to Staff's Second Request, Item 47.

⁵⁶ Kentucky Power's Response to Staff's Post-Hearing Request, Item 14.

Rockport Unit Power Agreement (UPA) Demand Expense Operating Ratio.

Kentucky Power proposed an adjustment to increase test-year purchased power expense to account for known and measurable changes to its Rockport UPA expenses.⁵⁷ Kentucky Power argued that the adjustment is necessary because the Rockport UPA rate calculation includes an operating ratio that increased the Rockport UPA expenses due to the Rockport Unit 2 SCR being placed into service in June 2020, after the test year.⁵⁸ The operating ratio component decreases the return component in order to remove CWIP.⁵⁹

Attorney General/KIUC witness, Mr. Kollen, recommended to remove Kentucky Power's proposed adjustment, and defer any increased expense to the Rockport UPA regulatory asset, to be recovered as increased amortization expense through Tariff PPA starting in December 2022.⁶⁰ Mr. Kollen argued that the post-test-year adjustments should be deferred to mitigate the immediate effect on ratepayers and allow Kentucky Power full recovery of its costs.⁶¹ In response, Kentucky Power stated that Kollen's proposed adjustment should be included in the Rockport UPA regulatory asset because it is a reasonable mitigation proposal in this case.⁶²

⁵⁷ Direct Testimony of Alex E. Vaughan (Vaughan Direct Testimony) at 48-49.

⁵⁸ *Id.*

⁵⁹ *Id.*; Kentucky Power's Response to Staff's Sixth Request for Information (Staff's Sixth Request), Item 12(b).

⁶⁰ Kollen Direct Testimony at 33-34.

⁶¹ *Id.*

⁶² Vaughan Rebuttal Testimony at 7-8.

The basis of Kentucky Power's proposed adjustment is that an increase in the operating ratio will increase the Rockport UPA purchase power expenses recovered in base rates. However, during the test year, the operating ratio effectively removed CWIP related to a project, which is recovered through Kentucky Power's environmental surcharge (Tariff ES), from the Rockport UPA calculation,⁶³ thus Kentucky Power was billed a return component based on all the in-service plant at that time, which will continue after the Unit 2 SCR is placed into service. The total Rockport UPA is recovered through the fuel adjustment clause, Tariff ES, and base rates.⁶⁴ The nonfuel components affected by the operating ratio are recovered either through base rates as purchased power expenses or Tariff ES as discrete expenses and capital projects, which do not include the operating ratio component of the UPA cost calculation. The increase in the operating ratio after the Unit 2 SCR went into service in June 2020 is simply the result of including the Unit 2 SCR in the return calculation. Because the Unit 2 SCR began to be recovered through Tariff ES in June 2020, Kentucky Power did not include this project in the Tariff ES base revenue requirement. The increases in the Rockport UPA associated with the Unit 2 SCR are already being recovered through Kentucky Power's Tariff ES.

Having reviewed the evidence of record and being otherwise sufficiently advised, the Commission finds that Kentucky Power's proposed adjustment to increase test-year purchased power expense to reflect an increase in the operating ratio included in the Rockport UPA cost calculation should be denied. Mr. Kollen's recommendation to defer

⁶³ Kentucky Power's Response to Staff's Sixth Request, Item 12(b).

⁶⁴ Kentucky Power's Response to the Attorney General/KIUC's First Request for Information (Attorney General/KIUC's First Request), Item 8.

this increase in expense and include it in the Rockport UPA regulatory asset is therefore unnecessary. The result is a decrease in test-year purchased power expense of \$1,695,513, which results in a revenue requirement reduction of \$1,705,844.

Kentucky State Income Tax Rate. In its application, Kentucky Power applied a blended effective state income tax rate of 5.85 percent in the calculation of its gross revenue conversion factor.⁶⁵ Attorney General/KIUC witness Mr. Kollen proposed to reduce Kentucky Power's revenue requirement to reflect the actual Kentucky state income tax rate of 5.00 percent resulting in a reduction of \$692,374 to the base revenue requirement.⁶⁶ In response to Commission Staff's Post-Hearing Request for Information, Kentucky Power provided under confidential seal its state income tax returns filed in Illinois, Michigan, and West Virginia for the years 2018 and 2019.⁶⁷ Additionally, Kentucky Power provided support for the apportionment factors it used in calculating the blended effective state income tax rate.⁶⁸ The Commission finds that Kentucky Power demonstrated sufficient support for the use of the blended effective income tax rate, which is based on a ratio of total sales to sales for each state in which it actually files tax returns, and therefore rejects Mr. Kollen's proposed adjustment.

Off-System Sales (OSS) Margins and System Sales Clause Tariff (Tariff SSC). During the test year, Kentucky Power included OSS margins in the amount of

⁶⁵ Application, Section V, Workpaper S-2, at 2.

⁶⁶ Kollen Direct Testimony at 36.

⁶⁷ Kentucky Power's Response to Staff's Post-Hearing Request, Item 17.

⁶⁸ *Id.* at Item 1.

\$7,343,330.⁶⁹ As discussed below, Kentucky Power's adjustment to test-year purchased power expenses for amounts related to the GreenHat default did not include an allocation to Tariff SSC for estimated amounts. The Commission finds that OSS margins should be adjusted to reflect the allocation of GreenHat default charges to Tariff SSC for the months of April 2020, through December 2020. Therefore, the Commission will utilize the OSS margins of \$7,326,879, rather than the test-year amount, resulting in a decrease in operating revenue of \$16,451. Additionally, the amount of OSS margins to be collected in base rates is \$7,326,879, rather than the \$7,343,330 proposed in the application.

Cost of Capital Adjustments

Environmental Surcharge. Kentucky Power proposed an adjustment to incorporate test-year Tariff ES expenses into its base rates, which synchronizes the expenses and revenues that flow through its Tariff ES and removes amounts related to the Mitchell Flue Gas Desulfurization project (FGD).⁷⁰ To place the Tariff ES base revenue requirement on the same basis as base rates, Kentucky Power utilized its requested return of equity (ROE) of 10.00 percent in the calculation of the ES base revenue requirement.⁷¹ Kentucky Power's adjustment reduced test-year expenses by \$28,786,651.⁷²

⁶⁹ Vaughan Direct Testimony at 43.

⁷⁰ Direct Testimony of Lerah M. Scott (Scott Direct Testimony) at 8-9.

⁷¹ Kentucky Power's Response to Commission Staff's Third Request for Information (Staff's Third Request), Item 1, Attachment 33.

⁷² Application, Section V, Exhibit 2 at 6.

Attorney General/KIUC witness Mr. Kollen recommended that the Tariff ES revenue requirement be reduced to remove CWC,⁷³ use a state income tax rate of 5.00 percent,⁷⁴ use an ROE of 9.00 percent,⁷⁵ and extend the Rockport 2 Unit Selective Catalytic Reduction project (SCR) depreciation period to ten years.⁷⁶ The total effect of these adjustments is a revenue requirement decrease of \$19,577,018.⁷⁷

The Commission will not accept Mr. Kollen's recommendation to adjust the state income tax rate used in Kentucky Power's Tariff ES and declines to extend the depreciation period for the Rockport Unit 2 SCR, based on the finding above that the appropriate state income tax rate is the blended rate and the Commission's concern regarding the numerous cost deferrals already established for Kentucky Power regarding the Rockport UPA. Based on its finding above regarding CWC in rate base, the Commission finds that CWC should be removed from Kentucky Power's Tariff ES rate base. Based on the finding below that Kentucky Power should utilize an ROE of 9.10 percent for limited purpose rider revenue requirement calculations, the Commission finds that Kentucky Power should utilize an ROE of 9.10 percent for all Tariff ES filings after the date of this Order. The adjustments to remove CWC from rate base and adjust the ROE to 9.3 percent include Tariff ES rate base recovered in base rates. The only remaining adjustment is to reduce the ROE for Mitchell Non-FGD rate base, without

⁷³ Kollen Direct Testimony at 17.

⁷⁴ *Id.* at 36.

⁷⁵ *Id.* at 46-47.

⁷⁶ *Id.* at 51-52.

⁷⁷ *Id.* at 7.

CWC, from 9.3 to 9.10 percent. Based on the Mitchell Non-FGD rate base, excluding CWC, of \$218,135,633, the resulting revenue requirement reduction is \$236,063. Kentucky Power shall file a revised Tariff ES to reflect the Commission authorized return on equity and rate base discussed in this Order, and the annual base revenue requirement as shown on Appendix D attached to this order.

OFFSET TO REVENUE INCREASE

Tariff Capacity Charge

As an offset to the proposed revenue increase, Kentucky Power proposed a conditional offer to terminate the Capacity Charge tariff two years early, which would offset rates by \$6,200,000 annually.⁷⁸ Kentucky Power conditioned this offer on the Commission accepting Kentucky Power's proposed revenue and CPCN requests, as well as all of the Company's other proposals without making any adjustments or modifications. Although Kentucky Power's proposal is effectively an attempt at a regulatory quid pro quo, the Company noted in its application (and in press offerings) the early termination of the Capacity Charge was offered in an attempt to "mitigate" the impacts of this matter.

The Capacity Charge tariff was one of the settlement provisions approved in Case No. 2004-00420.⁷⁹ The Capacity Charge tariff is a surcharge designed to recover from customers the supplemental annual payments for the Rockport UPA, between 2005 and 2022. The payments were structured so that Kentucky Power received \$5,100,000 annually from 2005 through 2009, \$6,200,000 from 2010 through 2021, and then

⁷⁸ The amount is prorated for calendar year 2022 since the UPA expires in December 2022.

⁷⁹ Case No. 2004-00420, *Application of Kentucky Power Company for Approval of a Stipulation and Settlement Agreement Resolving State Regulatory Matters* (Ky. PSC Dec. 13, 2004).

\$5,792,329 in 2022, when the payments, and Rockport UPA, terminate.⁸⁰ The parties to the settlement agreement approved in Case No. 2004-00420 agreed to these supplemental payments as consideration for Kentucky Power extending the Rockport UPA from December 31, 2004, through December 7, 2022.⁸¹ The supplemental payments are revenue without an expense.

The Attorney General/KIUC's witness, Mr. Kollen, argued that the Commission should require Kentucky Power to terminate the Capacity Charge no matter what because the Capacity Charge is a retail rate and not a cost imposed on Kentucky Power, and that the market conditions that warranted the equity incentive payments for extending the Rockport UPA lease no longer exist.⁸² In rebuttal testimony, Kentucky Power rejected the arguments of Attorney General/KIUC's witnesses as irrelevant, noting that the Commission recognized market conditions could change and that the revenue provided through the Capacity Charge was material consideration for Kentucky Power's agreement to extend the UPA.⁸³ Additionally, Kentucky Power argued that the Attorney General/KIUC were parties to the settlement in Case No. 2004-00420, and therefore are precluded from unilaterally now attempting to abrogate the settlement agreement.⁸⁴

As discussed throughout this Order, the Commission for multiple reasons cannot accept Kentucky Power's proposed application as filed. Kentucky Power's request to

⁸⁰ *Id.*, Appendix A at 4. \$5,792,239 represents payments through December 7, 2022, or 341/365 of \$6,200,000.

⁸¹ *Id.*, Appendix A at 2.

⁸² Kollen Direct Testimony at 57–58; and Attorney General/KIUC Post-Hearing Brief at 38–41.

⁸³ Kentucky Power Post-Hearing Brief at 26–28.

⁸⁴ *Id.* at 26–27.

approve a significant rate increase as filed would require us to abdicate our statutory responsibility to conduct a full and robust investigation to ensure that rates are fair, just and reasonable. Kentucky Power received the ongoing seven-figure payments as incentive to extend a power purchase agreement. The Commission will not require Kentucky Power to make good on its conditional offer. However, given Kentucky Power's concern for its customers, as expressed repeatedly in this pendency of this proceeding, the Commission expects Kentucky Power to earnestly consider the value to its customers by carrying out the offset to rates by terminating the Capacity Charge effective with or closely after the rates approved in this Order are placed into effect. As such, the Commission will allow Kentucky Power 15 days following service of this Order to respond by letter from Kentucky Power's President and Chief Operating Officer, Brett Mattison, indicating whether it will voluntarily forego all or a portion of the Capacity Charge for the remainder of the term of the UPA.

Unprotected Excess ADIT

Kentucky Power proposed to accelerate amortization of approximately \$65,000,000 of existing unprotected excess ADIT to offset the first year of the proposed rate increase, with a determination how applicable the amortization rate will be calculated after 2021. The Commission approved an 18-year amortization period for the unprotected excess ADIT in Case No. 2018-00035.⁸⁵ As of April 30, 2020, the unprotected excess ADIT balance was approximately \$113,500,000.⁸⁶ Kentucky Power proposed to amortize

⁸⁵ Case No. 2018-00035, *Kentucky Industrial Utility Customers, Inc. v. Kentucky Power Company* (Ky. PSC June 28, 2018).

⁸⁶ West Direct Testimony at 6–9.

the amount of unprotected excess ADIT required for these offsets ratably across 2021 to align with time of reduced base rate revenues during 2021.⁸⁷

The Attorney General/KIUC recommended that the unprotected excess ADIT be used to offset both 100.00 percent of the first year and 50.00 percent of the second year of the proposed rate increase.⁸⁸ The Attorney General/KIUC further recommended that, once applied to offset the rate increase, the unprotected excess ADIT continue to be amortized at current level until the balance is fully amortized.⁸⁹ In response, Kentucky Power asserted that, while there may be negative impacts on cash flow and credit metrics from its proposal, those could be borne for one year, but a longer period recommended by the Attorney General would be the type of event that leads to Kentucky Power being placed on a negative outlook by rating agencies or could result in a credit downgrade.⁹⁰

With the enactment of the Tax Cuts and Jobs Act (TCJA), the federal corporate income tax rate was reduced from 35 percent to 21 percent. This reduction in the federal corporate income tax rate on regulated utilities resulted in excess ADIT balances that were to be returned to ratepayers. The TCJA separated the excess ADIT into two categories: protected and unprotected. The TCJA normalization rules apply to return of the excess protected ADIT, whereas the return of the unprotected excess ADIT is not governed by normalization rules. Therefore, the prior agreed upon 18-year amortization

⁸⁷ Kentucky Power Response to Staff's Sixth Request, Item 13.

⁸⁸ Kollen Direct Testimony at 47–49; Attorney General/KIUC Post-Hearing Brief at 44-45.

⁸⁹ Kollen Direct Testimony at 49.

⁹⁰ Rebuttal Testimony of Brett Mattison (Mattison Rebuttal Testimony) at R5; West Rebuttal Testimony at R2; Messner Rebuttal Testimony at R6-R7; Hearing Transcript, Vol. III at 817–818; Kentucky Power Post-Hearing Brief at 23–24.

of the unprotected excess ADIT can be modified. The balance of the unprotected excess ADIT is estimated to be \$81,011,186 for 2021.⁹¹ Using a gross revenue conversion factor of 1.34492, the estimated revenue credit is \$108,945,504 for unprotected excess ADIT. Historically, Kentucky Power's protected excess ADIT is approximately \$3,500,000 per year.

The Commission agrees with the overall proposal to use the unprotected excess ADIT to mitigate the impact of the rate increase on their customers. However, the Commission is not persuaded by Kentucky Power's argument that the accelerated return of unprotected excess ADIT should be limited to one year because Kentucky Power offered conclusory statements of opinion from its own personnel without any evidentiary support. The Commission finds amortizing the total unprotected excess ADIT over three years followed by a review of rates at the end of three years is more appropriate as savings may be realized through the ending of the Rockport UPA and the associated environmental costs. Further, due to the anticipated savings from the termination of the Rockport UPA and therefore termination of associated costs that are currently in base rates and the termination of the Capacity Charge, the Commission finds that Kentucky Power should file a general base rate adjustment application for rates effective January 1, 2024.

The Federal Tax Cut (FTC) surcredit will follow the same allocation as in Case No. 2018-00035 where the total credit is allocated between residential and nonresidential

⁹¹ Figure 1 of West Rebuttal Testimony at R3. Note that the Fed Tax Cut Rider of \$6,951,693 in Figure 1 is an error as this amount is the 18 year amortization revenue credit balance after the GRCF is applied. However, this error would not change the end sum of the Total and EOY ADFIT Bal in Figure 1. See Case No. 2018-00035, Appendix A, Exhibit 2.

based upon the test-year revenues. The total credit will be approximately \$40,000,000 per year total for unprotected excess ADIT and protected excess ADIT. For residential customers only, the rate credits will continue to be higher in the winter heating months of December through March to provide greater benefits during the high-usage winter hearing months. Such an allocation also more closely matches revenues with cash flow for Kentucky Power. For a residential customer using 1100 kWh per month, the savings during the winter heating month will be \$24.06.⁹²

RATE OF RETURN

Capital Structure and Cost of Debt

Kentucky Power proposed an adjusted test-year-end capital structure consisting of 53.73 percent long-term debt at 4.04 percent; zero percent short-term debt at 2.23 percent; 3.02 percent accounts receivable financing at 2.80 percent;⁹³ and 43.25 percent common equity at a return of 10.00 percent.⁹⁴ The proposed capital structure included one adjustment for the refinance of \$65,000,000 WVEDA Mitchell Project, Series 2014A Bonds on June 19, 2020.⁹⁵ For the short-term debt component, the balance at the end of the test year was approximately \$10,685,291; however, this balance was reduced to zero as a result of an adjustment for the excessive target levels of coal from the Mitchell coal stock. The test-year balance of the excessive Mitchell coal stock, or \$13,084,362,

⁹² See Appendix B for surcredit calculations.

⁹³ As filed the interest rate of the Accounts Receivable was 2.802 percent.

⁹⁴ Direct Testimony of Franz D. Messner (Messner Direct Testimony) at 4.

⁹⁵ Messner Direct Testimony at 6.

was first applied to the short-term debt followed with the balance being allocated proportionally between long-term debt and equity.⁹⁶

Short-Term Debt. Regarding the zero balance of short-term debt, the Attorney General/KIUC's witness, Mr. Kollen, asserted that Kentucky Power carried a much larger average monthly balance of short-term debt during the test year and just before the end of the test year, significantly paid down the short-term debt and then moved it to zero with the Mitchell coal stock adjustment. Mr. Kollen suggested that, due to the short-term debt pay down, the capital structure should include the test-year average of short-term debt at the most recent interest rate incurred by Kentucky Power, 0.51 percent.⁹⁷ Mr. Kollen also proposed to allocate the Mitchell coal stock adjustment proportionately across the entire capital structure rather than applying it to short-term debt first and then allocating the balance.⁹⁸

In response, Kentucky Power contended that it reduced its short-term holdings in February 2019, via a two-year term loan at 1.68 percent⁹⁹ as opposed to a long-term debt issuance because, with the uncertainty with economic development activity, marketing of the private placement to investors would be difficult and could result in a higher interest rate.¹⁰⁰ Kentucky Power further contended that it followed regulatory filing requirements for an historical test year with the inclusion of the end of the test-year book balance of

⁹⁶ Application, Section V, Exhibit 1, Workpaper S-3.

⁹⁷ Kollen Direct Testimony at 40–41.

⁹⁸ *Id.* at 39.

⁹⁹ Actual interest rate was listed as 1.683%.

¹⁰⁰ Rebuttal Testimony of Franz D. Messner (Messner Rebuttal Testimony) at R3.

short-term debt.¹⁰¹ Regarding the Mitchell coal stock adjustment, Kentucky Power supported the adjustment as being an appropriate allocation as it avoids a negative short-term debt balance and is consistent with prior Commission rulings in Case Nos. 2014-00396 and 2017-00179, and therefore both proposals of Mr. Kollen should be rejected.¹⁰²

The Attorney General/KIUC supported Mr. Kollen's assertion regarding the allocation of the Mitchell coal stock stating the proposed allocation is unreasonable.¹⁰³ The Attorney General/KIUC argued that long-term coal inventories are not solely financed with short-term debt and any Mitchell coal stock adjustment should not assume that low-cost, short-term debt will primarily be used.¹⁰⁴ The two parties alleged that if there was a sufficient balance of short-term debt at the end of the test year, 100.00 percent of the Mitchell coal stock adjustment would have been entirely applied to short-term debt for the sole reason there was sufficient short-term debt to do so, not because the excessive coal stock was solely financed by short-term debt.¹⁰⁵

Mr. Kollen also addressed \$40,000,000 in Senior Unsecured Notes—Series A that are currently at an effective interest rate of 7.32 percent¹⁰⁶ and will mature on June 18, 2021, less than six months after rates are effective in the instant case. Mr. Kollen proposed to adjust the cost of this debt to 4.00 percent and defer any difference in interest

¹⁰¹ *Id.* at R4.

¹⁰² *Id.*; Kentucky Power Post-Hearing Brief at 91; Case No. 2014-00396, June 22, 2015 Order; and Case No. 2017-00179, Jan. 18, 2018 Order.

¹⁰³ Attorney General/KIUC Post-Hearing Brief at 27.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ Actual effective interest rate is 7.319%.

expense as a regulator asset or liability.¹⁰⁷ Mr. Kollen advocated that such an adjustment will lower annual interest expense, and if the Commission does not make an adjustment, Kentucky Power will recover this interest expense difference at the detriment of its own customers.¹⁰⁸ Kentucky Power asserted that such an adjustment is not appropriate because those notes are part of the test-year book balance of long-term debt and are currently outstanding.¹⁰⁹ Kentucky Power also asserted that Mr. Kollen's adjustment does not meet the criteria of being known and measurable, but instead applied a hypothetical interest rate.¹¹⁰ Kentucky Power contended that this recommendation does not consider Kentucky Power's already struggling credit metrics and is a punitive reduction of Kentucky Power's revenue requirement.¹¹¹

The Attorney General/KIUC noted that it is Kentucky Power's practice to issue and replace maturing debt with new debt.¹¹² The Attorney General/KIUC further noted that the cost of debt is at a historical low due to the COVID-19 pandemic and that is likely that the interest rates will be even lower than Mr. Kollen's proposed 4.00 percent.¹¹³ The two parties recommended following Mr. Kollen's proposal and adjust the long-term debt rate for this maturing bonds and establish a regulatory asset for any interest costs until the bonds mature and are refinanced and a regulatory liability or asset for any difference

¹⁰⁷ Kollen Direct Testimony at 42–43.

¹⁰⁸ *Id.*

¹⁰⁹ Messner Rebuttal Testimony at R5.

¹¹⁰ Kentucky Power Post-Hearing Brief at 22.

¹¹¹ *Id.*

¹¹² Attorney General/KIUC Post-Hearing Brief at 29.

¹¹³ *Id.*

between the actual interest rates and 4.00 percent until the next base rate case. The Attorney General/KIUC maintained that this rate adjustment is a known and measurable adjustment akin to Kentucky Power's forecasted proposed post-test-year increase to revenue requirements related to the Rockport UPA demand expense increase.¹¹⁴

In Case Nos. 2014-00396 and 2017-00179, Kentucky Power's proposed capital structure included an allocation of the excess Mitchell coal stock whereby it was first allocated to short-term debt. In Case No. 2014-00396, the entirety of the Mitchell coal stock was allocated to short-term debt, and this allocation, and others, led to a negative short-term debt amount in the proposed capital structure.¹¹⁵ In that proceeding, the Attorney General/KIUC, took issue with the negative short-term debt balance proposed in the application. To address this, Kentucky Power agreed to a zero balance of short-term debt and a pro rata allocation between long-term debt and equity and, in the final Order of that proceeding, the Commission found that Kentucky Power's capital structure for ratemaking purposes should include zero short-term debt.¹¹⁶ In Case No. 2017-00179, Kentucky Power conformed to the prior case and the proposed capital structure included an allocation of the Mitchell coal stock, first to short-term debt until the balance reached zero, and then the remaining balance was applied proportionally between long-term debt and equity.¹¹⁷ In that proceeding, although the Commission made other adjustments to the short-term debt, the proposed allocation of the Mitchell coal stock was

¹¹⁴ *Id.* at 30.

¹¹⁵ Case No. 2014-00396, Application, Section_V_Exhibit 1.xlsx, Tab Sch 3.

¹¹⁶ Case No. 2014-00396, June 22, 2015 Order at 36.

¹¹⁷ Case No. 2017-00179, Application, Section V, Exhibit 1, Workpaper S-3.

not altered.¹¹⁸ In the instant case, Kentucky Power stated that it uses its working capital resources to pay for expenses and that all capitalized items, including the Mitchell coal inventory, are financed based upon the Company's overall capital structure.¹¹⁹ Kentucky Power also stated that because the Mitchell coal stock is a shorter term in nature, it is reasonable to adjust short-term debt first.¹²⁰ The Commission finds that the proposed allocation to be reasonable based exclusively upon past precedent. However, the Commission encourages Kentucky Power to provide support that coal purchases are primarily financed through short-term debt in its next base rate case.

The Commission also finds that the short-term debt at the test-year end is reasonable and, although it is uncharacteristically low as compared to the rest of the test year, Kentucky Power followed standard filing requirements for an historical test year with the inclusion of the end of the test-year book balance of short-term debt.

As mentioned above, in Case No. 2017-00179, the Commission made a further adjustment to short-term debt due to Kentucky Power selling its receivables to AEP for cost savings related to default risk and for improved cash flow; however, the uncollectible accounts remained with Kentucky Power and were not sold with the accounts receivable. Therefore, since the cost of accounts receivable financing was higher than traditional short-term financing, the Commission reduced the total capital structure percentage of accounts receivable financing and correspondingly increased the percentage of short-term debt. In response to discovery, Kentucky Power stated that because Kentucky

¹¹⁸ Case No. 2017-00179, Jan. 18, 2018 Order at 24.

¹¹⁹ Kentucky Power's Response to Staff's Sixth Request, Item 7.

¹²⁰ *Id.*

Power sells its customer accounts receivable and accrued unbilled revenue balances to AEP Credit, the uncollectible accounts do not remain with Kentucky Power.¹²¹ Therefore, the Commission will not make a similar adjustment in this case and finds the cost of short-term debt and accounts receivable financing of 2.23 percent and 2.80 percent, respectively, to be reasonable.

Long-Term Debt. Regarding the bond maturity, based upon settled case law and Commission regulations, the Commission must determine what the reasonable cost is for ratemaking purpose for a maturing debt that, shortly after new rates are in effect, will be reissued at a significantly lower interest rate. In determining a utility's cost of capital, the Commission has the authority to impute hypothetical debt rates for instruments reasonably anticipated to be issued during a rate case test year provided that the hypothetical rates are supported by substantial evidence.¹²² The determination of hypothetical, yet reasonable and evidence-supported, debt rates is effectively what the Commission approved above regarding Kentucky Power's short-term debt and the Mitchell coal stock. Commission regulation 807 KAR 5:001, Section 16(1)(a)(1), permits adjustments to historical test periods for known and measurable changes. According to Kentucky Power's testimony, it typically refinances a debt instrument when it matures.¹²³ As discussed above, Kentucky Power's Senior Unsecured Notes–Series A debt with an interest rate of 7.32 percent will mature June 18, 2021. Kentucky Power reported that as of December 2, 2020, current bond rates range from 2.59 percent for a

¹²¹ Kentucky Power's Response to Staff's Fourth Request, Item 51.

¹²² *Public Serv. Comm'n v. Continental Telephone Co. of Ky.*, 692 S.W.2d, 798-801.

¹²³ Hearing Transcript, Vol. III at 824–825.

7-year bond tenor to 4.49 percent for a 30-year tenor.¹²⁴ Based upon the evidence of record regarding its refinancing practices, Kentucky Power is expected to take advantage of the refinance opportunity due to the interest rate savings as the current rates are at a minimum 2.83 percent lower, which represents an annual savings of \$1,131,600.¹²⁵ The Commission finds that adjusting the interest rate of this long-term debt instrument is reasonable because there is substantial evidence that Kentucky Power will refinance the debt and there is significant evidence that the imputed rates will be substantially lower than interest rates Kentucky Power included in the test year.

Based on the evidence of record, the Commission finds that the midpoint of the current rates, or 3.54 percent, is reasonable and will result in an annual interest rate savings of \$1,511,600. Kentucky Power should defer the difference in jurisdictional interest expense between 3.54 percent and the high-cost debt until it matures as a regulatory asset. The resulting long-term debt rate for the capital structure will be 3.89 percent.

Return on Equity

In its application, Kentucky Power's expert witness, Adrian M. McKenzie, CFA, proposed an ROE using the discounted cash flow model (DCF), the capital asset pricing model (CAPM), the empirical CAPM (ECAPM), utility risk premium model (RP), and the expected earnings approach. In addition, Mr. McKenzie calculated an ROE estimate for nonutility companies for use as a comparative benchmark. Mr. McKenzie, after making

¹²⁴ Kentucky Power's Response to Staff's Post-Hearing Request, Item 18.

¹²⁵ $\$40,000,000 * 2.829 \% = \$1,131,600$.

adjustments for flotation costs, company size, and removing high and low extremes for several model results, recommended an ROE 10.30 percent with a range of 9.40 percent to 10.50 percent.¹²⁶ Mr. McKenzie argued that Kentucky Power’s risk exposure regarding its ability to recover rising costs and investments timely, its need for financial strength, coupled with the heightened economic, financial, and environmental uncertainties demonstrates that a 10.30 percent ROE is warranted.¹²⁷ Kentucky Power, in an effort to mitigate the effect of the requested increase in rates, requested a 10.00 percent ROE.¹²⁸

The table below summarizes the range of Mr. McKenzie’s ROE estimates.¹²⁹

Methodology	ROE-Average	ROE-Midpoint
DCF		
DCF - Value Line	9.7%	10.2%
DCF – IBES	9.1%	8.7%
DCF – Zacks	9.2%	9.4%
DCF - Internal br+sv	8.6%	9.6%
CAPM		
Current Bond Yield	8.0%	8.3%
Projected Bond Yield	8.4%	8.8%
ECAPM		
Current Bond Yield	9.1%	9.3%
Projected Bond Yield	9.5%	9.8%
Utility Risk Premium		
Current Bond Yield		9.6%
Projected Bond Yield		10.5%
Expected Earnings	11.0%	10.6%
ROE Range	9.4%	10.5%

¹²⁶ Direct Testimony of Adrian M. McKenzie CFA (McKenzie Direct Testimony) at 4 and 9.

¹²⁷ *Id.* at 4, 9, 12, and 14.

¹²⁸ *Id.* at 4.

¹²⁹ *Id.* at Exhibit AMM-2.

Direct intervenor testimony and analysis regarding ROE was sponsored by the Attorney General/KIUC, and performed by Richard A. Baudino. Mr. Baudino's analysis used both the DCF and CAPM models and a historical risk premium analysis. He recommended an ROE range of 8.93 percent to 9.25 percent based upon the DCF results only.¹³⁰ Mr. Baudino utilized the CAPM model as an alternative method to calculate ROE only. Mr. Baudino stated that considerable judgement must be employed to determine market returns and expected risk premium elements for the CAPM model, and that the analyst's application of judgement can influence the results significantly.¹³¹ Mr. Baudino argued that the sharp increase in beta values results from extreme market volatility due to the effects of COVID-19. Mr. Baudino, citing lower historical beta values warranted caution in the current case, asserted that it is unlikely that the 63.00 percent increase in expected beta values for electric utilities from earlier this year is accurate or reliable, or is necessarily reflective of investors' longer-term expectations.¹³²

The Attorney General/KIUC's witness, Mr. Kollen, adopted a 9.00 percent ROE, citing the poor economic conditions of Kentucky Power's service territory.¹³³ SWVA did not file testimony, but, in its brief, recommended that the Commission adopt a 9.00 percent ROE.¹³⁴ Similarly, Walmart did not file testimony regarding the ROE, but, in its brief, argued that the 9.20 percent ROE recently awarded by the Virginia State

¹³⁰ Direct Testimony of Richard A. Baudino (Baudino Direct Testimony) at 35.

¹³¹ *Id.* at 29.

¹³² *Id.* at 34.

¹³³ Kollen Direct Testimony at 45–46.

¹³⁴ SWVA Post-Hearing Brief at 2–4.

Corporation Commission closely aligns with the ROE recommendations of other witnesses in this proceeding.¹³⁵ The Joint Intervenors did not propose a specific ROE to be adopted, asserting that the ROE should be towards the lower end of Commission Staff's analysis, but objected that Kentucky Power's proposed 10.00 percent ROE was higher than justified.¹³⁶

For his DCF analysis, Mr. Baudino started with Mr. McKenzie's proxy group of 23 companies but eliminated two companies, one of which had lowered its dividend and the other was divesting electric operations in the United Kingdom.¹³⁷ Using updated proxy group information, Mr. Baudino employed forecasted dividend and earnings growth rates, and calculated DCF estimates using two methods. The first applied average growth rates and the second, median growth rates.¹³⁸ Method 1 ROE estimates range from 8.75 to 9.05 percent and Method 2 ROE estimates range from 8.61 to 9.63 percent, with averages of 8.93 and 9.25, respectively.¹³⁹

For his CAPM estimates, Mr. Baudino employed two approaches. The first approach used the forecasted market return and the second approach used a historical risk premium based upon actual stock and bond returns from 1926 to 2019.¹⁴⁰ Mr. Baudino updated Mr. McKenzie's beta value inputs, noting that they had increased since

¹³⁵ Walmart Post-Hearing Brief at 7–10.

¹³⁶ Direct Testimony of James Owen (Owen Direct Testimony) at 16-24; Joint Intervenors' Post-Hearing Brief at 15–16.

¹³⁷ Baudino Direct Testimony at 21.

¹³⁸ *Id.* at 24–25.

¹³⁹ *Id.* at 25 and Exhibit RAB-4.

¹⁴⁰ *Id.* at 29 and Exhibit RAB-5 and RAB-6.

the start of the pandemic in early 2020.¹⁴¹ Two different risk free rates were utilized. The first measure was an average of the 30-year Treasury bond yields for the March through August 2020 period. The second measure was a normalized risk free rate developed by Duff and Phelps, utilizing a measure for the real risk free rate and expected inflation.¹⁴²

The following table summarizes Mr. Baudino's results:¹⁴³

DCF Methodology	
Average Growth Rates	
High	9.05%
Low	<u>8.75%</u>
Average	8.93%
Median Growth Rates	
High	9.63%
Low	<u>8.61%</u>
Average	9.25%
CAPM Methodology	
Forward looking Mkt Return	
Current 30-year Treasury	9.80%
D&P Normal Risk Free Rate	9.95%
Historical Risk Premium	
Current 30-year Treasury	6.73% - 7.65%
D&P Normal Risk Free Rate	7.85% - 8.77%

Mr. Baudino argued that his recommended ROE range is reasonable as it is consistent with his DCF results and falls within the CAPM estimate range. In addition, a reliance on the DCF results is supported by a number of factors including reduced stock market volatility from the April through May 2020, and relatively stable dividend yields since May 2020, and that the six month average dividend yield is representative of

¹⁴¹ *Id.* at 33.

¹⁴² *Id.* at 32 and Exhibit RAB-5 and RAB-6.

¹⁴³ *Id.* at 35.

investor expectations given the current environment. Mr. Baudino further argued that interest rates are low and long term utility bond yields have fallen substantially since January 2020.¹⁴⁴ Finally, Mr. Baudino stated that his results are reasonable as the recommended range falls within AEP's own return projections of 8 to 10 percent.¹⁴⁵

Mr. Baudino took issue with multiple assumptions used in Mr. McKenzie's ROE calculations and concluded that Mr. McKenzie's 10.30 percent recommendation was inconsistent with current financial market evidence and the low interest rate environment.¹⁴⁶ Mr. Baudino argued that the forecasted rates are often overstated and should not be given preference over current rates. In addition, he noted that the Value Line's updated forecasts for the 2021-2024 period for the 10-year Treasury note and the 30-year Treasury bond were substantially lower than the original forecasts supporting Mr. McKenzie's calculations.¹⁴⁷ Regarding the DCF calculations, Mr. Baudino argued that the practice of excluding select low ROE observations biased Mr. McKenzie's DCF results upward while the inclusion of excessively high observations ranging from 12-13.6 percent was unreasonable as such are much higher than any recent Commission allowed ROE.¹⁴⁸ Mr. Baudino strongly recommended rejecting Mr. McKenzie's DCF approach.¹⁴⁹

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 36 and Exhibit RAB-2 at 3 of 3.

¹⁴⁶ *Id.* at 37.

¹⁴⁷ *Id.* at 39.

¹⁴⁸ *Id.* at 40-41.

¹⁴⁹ *Id.* at 42.

Regarding the CAPM and ECAPM models, Mr. Baudino argued that Mr. McKenzie offered no support that the ECAPM model was favored by investors over the standard CAPM model. In addition, Mr. Baudino argued that the use of the ECAPM model suggests that the Value Line published betas are imprecise.¹⁵⁰ Mr. Baudino contended that Mr. McKenzie's estimated expected market return calculation was flawed by unnecessarily restricting the number of companies included in the calculation, which served to overstate the estimate.¹⁵¹ Mr. Baudino also rejected Mr. McKenzie's application to both the CAPM and ECAPM model of a size adjustment stating that such adjustments were inappropriate as the comparative betas of the decile groups used to make the adjustments had average beta values far greater than the 0.87 average utility proxy group beta value.¹⁵² Mr. Baudino further rejected the use of forecasted interest rates and bond yields, arguing that financial markets are efficient and that current interest rates and bond yields embody all relevant market data and investor expectations, and are indicative of investor expectations of future interest rate changes.¹⁵³ Regarding Mr. McKenzie's Utility Risk Premium approach, Mr. Baudino argued that this approach is too imprecise and should only be used as a general guide and was overstated due to the use of forecasted utility bond yields.¹⁵⁴ For the Expected Earnings Approach, Mr. Baudino recommended not relying on forecasted ROEs for the same reasons as not relying on forecasted interest

¹⁵⁰ *Id.* at 43.

¹⁵¹ *Id.* at 44.

¹⁵² *Id.*

¹⁵³ *Id.* at 45–46.

¹⁵⁴ *Id.* at 48.

rates.¹⁵⁵ Finally, Mr. Baudino argued that applying a flotation cost adjustment was inappropriate as current stock prices already account for flotation costs and the inclusion of such amounts to double counting.¹⁵⁶

In rebuttal testimony, Mr. McKenzie asserted that Mr. Baudino's ROE recommendation was below realistic investor expectations. Specifically, Mr. McKenzie disputed Mr. Baudino's ROE analyses for the following reasons:¹⁵⁷

- The discussion of current capital markets is incomplete and potentially misleading.
- There were insufficient checks on the reasonableness to test DCF results and a failure to evaluate the reasonableness of individual DCF estimates.
- Reliance on historical data compromised the application of the CAPM model and the forward-looking CAPM application had methodological shortcomings and inconsistencies.
- Failure to apply a flotation cost adjustment contradicts findings in financial literature and economic requirements underlying a fair rate of return.
- Failure to consider both the ECAPM and risk premium approaches, which are recognized ROE methodologies.
- The criticism of the size adjustment, market return calculations, expected earnings approach, and nonutility analysis is without merit.

¹⁵⁵ *Id.* at 49.

¹⁵⁶ *Id.* at 50.

¹⁵⁷ Rebuttal Testimony of Adrien M. McKenzie (McKenzie Rebuttal Testimony) at R3.

Mr. McKenzie provided updated analyses using current information to reflect changes in capital market conditions that occurred subsequent to the filing of his direct testimony. The table below summarizes the range of Mr. McKenzie's revised ROE estimates:¹⁵⁸

Methodology	ROE- Average	ROE- Median	ROE- Midpoint
DCF			
DCF - Value Line	8.9%	8.7%	10.3%
DCF – IBES	9.1%	9.3%	8.9%
DCF – Zacks	9.3%	9.3%	9.2%
DCF - Internal br+sv	8.2%	8.0%	8.7%
Average	8.9%	8.8%	9.2%
CAPM			
Current Bond Yield	10.6%	10.3%	10.8%
Projected Bond Yield	10.7%	10.4%	10.9%
Average	10.6%	10.4%	10.8%
ECAPM			
Current Bond Yield	10.9%	10.5%	11.1%
Projected Bond Yield	11.0%	10.7%	11.1%
Average	10.9%	10.6%	11.1%
Utility Risk Premium			
Current Bond Yield	9.3%	9.3%	9.3%
Projected Bond Yield	10.1%	10.1%	10.1%
Average	9.7%	9.7%	9.7%
Expected Earnings	10.6%	10.9%	10.6%
Indicated ROE	10.1%	10.1%	10.3%

The full range of Mr. McKenzie's updated ROE estimates extends from a low of 8.00 percent to a high of 11.10 percent. Mr. McKenzie argued that an ROE range of 9.30-10.40 percent before a flotation cost adjustment falls within the middle range of the

¹⁵⁸ Nov. 17–24, 2020 Hearing, Kentucky Power Exhibit 9.

updated ROE results and that Kentucky Power's proposed 10.00 percent ROE in the middle of the results.¹⁵⁹

Comparing Mr. McKenzie's original and updated ROE estimates shows that the CAPM and ECAPM estimates are significantly higher. The driver of the higher CAPM and ECAPM estimates were higher beta values as the other model inputs moved in a downward direction.¹⁶⁰ Mr. McKenzie's updated DCF ROE average estimate decreased slightly from the original estimate, decreasing from 9.20 percent to 8.90 percent. Similarly, for the Utility Risk Premium estimate, which decreased from 10.10 percent to 9.70 percent, and for the Expected Earnings estimate, which decreased from 11.00 percent to 10.60 percent.

The Commission continues to believe that it is appropriate for utilities to present and the Commission evaluate multiple methodologies to estimate ROEs and that it is the Commission's role to analyze the various approaches as presented by the parties. The evaluation of an ROE may consider many factors, including opportunity costs. There have been sustained downward adjustments of both the short-term and longer-term interest rates, with no indication either will increase in the near future. In addition, recent regulatory decisions regarding awarded ROEs have shown a clear downward trend. For example, S&P Global Market Intelligence's Regulatory Focus reports that the average ROE awarded in the first quarter 2020 was 9.58 percent, 9.47 percent in the second

¹⁵⁹ McKenzie Rebuttal Testimony at R38.

¹⁶⁰ McKenzie Direct Testimony at Exhibits AMM-6 and AMM-7; McKenzie Rebuttal Testimony, Exhibits AMM-17 and AMM-18.

quarter 2020, and 9.44 for the third quarter.¹⁶¹ Further support for lower ROE trends come from affiliates within the AEP family, including a 9.45 percent award for SWEPCO Arkansas and 9.40 percent award for AEP Texas.¹⁶² Also, as noted by Walmart in its brief, in the most recent triennial review of Appalachian Power Company, the Virginia State Corporation Commission awarded a 9.20 percent ROE, down from the previous 9.42 percent ROE award that covered the 2017-2019 triennial period.¹⁶³

The Commission notes that, with the relative decline of industry and the economy in eastern Kentucky generally, Kentucky Power has struggled to achieve its allowed ROE.¹⁶⁴ Furthermore, the Commission recognizes the need for adequate cash flow so that Kentucky Power can effectively manage its operations. Balancing the needs of Kentucky Power and its customers, and reviewing the record in its entirety in this proceeding, the Commission finds that an ROE of 9.3 percent is fair, just and reasonable. The approved ROE falls within the top range of the Attorney Generals/KIUC's recommended range and although is not in Mr. McKenzie's recommended range it does fall within his models. Additionally, although the Commission believes this ROE is higher than evidence in this matter may support, certain factors lead the Commission to approve an ROE at this level. Some factors contributing to this higher ROE are the application of

¹⁶¹ Kentucky Power's Response to Attorney General/KIUC First Request, Item 84, Attachment 1; and Kentucky Power's Response to Staff's Post-Hearing Request, Item 11.

¹⁶² Kentucky Power's Response to Commission's Staff's Fourth Request, Item 32, Attachment 1.

¹⁶³ Walmart Post-Hearing Brief at 8–9; Case No. PUR-2020-00015, *Application of Appalachian Power Company for a 2020 Triennial Review of Its Base Rates, Terms, and Conditions* (SCC Nov. 24, 2020).

¹⁶⁴ The Commission notes that while Kentucky Power's transmission investments allow it to earn a return, the transmission expenses associated with Kentucky Transco investments represent ratepayer investment expenses for which Kentucky Power does not earn a return. At the margin, this arrangement may benefit Kentucky Transco and AEP generally to the detriment of Kentucky Power.

a lower ROE for single issue riders, and the need for additional operating revenues to offset the reduced revenues and cash flow from the amortization of excess ADIT and Kentucky Power's numerous deferrals.

Rate of Return Summary

Applying the rates of 3.89 percent for long-term debt, 2.23 percent for short-term debt, 2.80 percent for accounts receivable financing, and 9.3 percent of common equity to the adjusted capitalization produces an overall cost of capital of 6.19 percent.

REVENUE ALLOCATION AND RATE DESIGN

Cost of Service Study (COSS) and Revenue Allocation

Kentucky Power filed a fully allocated jurisdictional COSS to determine the cost to serve each customer class as well as the rate of return (ROR) on rate base for each rate class during the test year. Kentucky Power's COSS utilizes the 12 coincident peak (12 CP) method.¹⁶⁵ The 12 CP COSS utilized a production demand allocation factor based on the 12 monthly internal peak demands for the test year to allocate production plant and demand-related production O&M expenses among Kentucky Power's retail classes. None of the intervenors objected to the filed COSS.

In its application, Kentucky Power stated that the primary cost drivers for the rate increase are the loss of industrial customers and transmission costs. Kentucky Power explained that, since the end of the test year in the 2017 rate case, customer usage declined 576 million kWh, which translated into a loss of \$19,478,639 and 77.85 percent

¹⁶⁵ Direct Testimony of Jason M. Stegall (Stegall Direct Testimony) at 9.

of the total load loss is from the industrial class.¹⁶⁶ The loss of the industrial load can be seen in the cost shifts to the residential class in the last three COSSs as illustrated below:

<u>Rate Case</u>	<u>Total Operating Expense</u>	<u>Residential Class</u>	<u>Percentage</u>
2014– 00396 ¹⁶⁷	\$485,021,545	\$211,916,612	43.7%
2017– 00179 ¹⁶⁸	\$523,190,005	\$241,412,671	46.4%
2020– 00174 ¹⁶⁹	\$499,531,792	\$251,534,326	50.4%

Although the current rate design illustrates the interclass subsidies, the proposed revenue increase is allocated to each class based upon their contribution to rate base without any reduction to these interclass subsidies. Kentucky Power stated that if the Commission were to approve a lower increase than what is requested, then Kentucky Power would be in favor of removing a portion of the interclass subsidy that is deemed reasonable, stating that although it did not propose reducing the existing interclass subsidies, cost based rates continue be Kentucky Power’s goal.¹⁷⁰ None of the intervenors objected to this proposed allocation. However, Wal-Mart suggested that if the final increase granted is less than what is proposed, that a portion of the reduction in the

¹⁶⁶ Direct Testimony of Brett Mattison at 13; and Kentucky Power’s Response to Staff’s Fourth Request, Item 29, KPCO_R_KPSC_4_29_Attachment1.xlsx.

¹⁶⁷ Case No. 2014-00396, Direct Testimony of Jason M. Stegall, Exhibit JMS-2, at 10 of 30.

¹⁶⁸ Case No. 2017-00179, Direct Testimony of Douglas R. Buck, Exhibit DRB-1, at 10 of 29.

¹⁶⁹ Stegall Direct Testimony, Exhibit JMS-1, at 10 of 30.

¹⁷⁰ Vaughan Direct Testimony at 9.

revenue requirement increase be used to further reduce the current class subsidies.¹⁷¹

The proposed rate increases are as follows:¹⁷²

	<u>Propose Increase</u>	<u>Percent Increase</u>	<u>Current ROR</u>	<u>Proposed ROR</u>
Rate RS	\$ 39,415,631	17.97%	-0.11%	3.57%
Rate GS	\$ 9,364,809	12.76%	7.25%	10.93%
Rate LGS	\$ 7,521,879	12.93%	6.38%	10.06%
Rate IGS	\$ 12,615,284	10.91%	5.62%	9.30%
Rate MW	\$ 19,527	10.70%	9.51%	13.19%
Rate OL	\$ 1,013,097	12.99%	15.21%	18.89%
Rate SL	\$ 146,508	10.18%	17.35%	21.03%
TOTAL	\$ 70,096,735	14.73%	2.86%	6.54%

For its COSS, Kentucky Power applied a version of the minimum size method for poles, conductors, and transformers by basing the fixed distribution plant allocation factors upon the typical distribution plant component size when connecting the average distribution level customer.¹⁷³ While use of the minimum sized method, or in this case, something similar, is not uncommon, typically it is defaulted to when the zero-intercept method results in statistically unreliable results. Kentucky Power stated that it did not perform the zero-intercept method, stating that it did not have the detailed information needed to properly perform the zero-intercept method.¹⁷⁴ The Commission believes that such modeling should be performed first and finds that Kentucky Power should perform a zero-intercept study in its next base rate case.

The Commission accepts Kentucky Power's proposal to use the 12 CP method as a guide to determining revenue allocation. Additionally, the Commission agrees to

¹⁷¹ Direct Testimony of Lisa V. Perry (Perry Direct Testimony) at 4.

¹⁷² Stegall Direct Testimony, Exhibit JMS-2, page 1 of 3.

¹⁷³ Kentucky Power's Response to Staff's Sixth Request, Item 28.

¹⁷⁴ *Id.*

allocating the revenue increase based upon each class's contribution to rate base without any reduction to the interclass subsidies especially given the economic conditions not only inherent in Kentucky Power's service territory but also as the result of the impact of the COVID-19 pandemic. Allocating the Commission's revenue increase results in a 12.71 percent increase for the residential class.

Residential Customer Charge

In its application, Kentucky Power proposed an increase in the residential customer charge from \$14.00 to \$17.50, an increase of 25.00 percent. Kentucky Power maintained that because the residential class does not include a separate demand charge, the majority of fixed distribution costs are recovered through the energy charge, or, at a minimum, a larger portion should be recovered in the basic service charge.¹⁷⁵ Kentucky Power asserted that the current residential customer charge is too low relative to the fixed cost of providing electric service, thus creating intraclass subsidies between residential customers, which disadvantages higher usage customers.¹⁷⁶ Kentucky Power supported its argument that the current customer charge is not representative of the fixed costs by comparing it to its calculated fixed costs based upon its version of the minimum system method of \$38.31 and a marginal cost study of \$35.00.¹⁷⁷ Kentucky Power stated that beyond simply cost causation principles, a benefit of increasing the customer charge

¹⁷⁵ Vaughan Direct Testimony at 11.

¹⁷⁶ *Id.*

¹⁷⁷ Kentucky Power's Supplement Response to Staff's Fifth Request for Information (Staff's Fifth Request), Item 15; and Vaughan Direct Testimony, Exhibit AEV-2.

closer to the actual cost of providing service include reduced bill volatility, especially for electric heating customers during winter months.¹⁷⁸

Mr. James Owen, on behalf of the Joint Intervenors, opposed any increase to the customer charge, arguing that an increase would have a detrimental impact on low-income customers, on those customers with on-site distributed energy resources, and on overall energy conservation and energy efficient (EE) goals.¹⁷⁹ Mr. Owen stated that an increased customer charge imposes a disproportionate burden on vulnerable customers who may be struggling with volatile or burdensome electricity bills.¹⁸⁰ In support of Mr. Owen, the Joint Intervenors noted that if approved, the residential customers in the most distressed region of the Commonwealth would bear the burden of the highest such charge of any Investor Owned Utility in the Commonwealth.¹⁸¹ The Joint Intervenors further noted that combined with the January 2018, increase in the customer charge, moving to \$17.50 would cumulatively result in a 59.09 percent increase.¹⁸² No other intervenor addressed the proposed customer charge.

In its post-hearing brief, the Sierra Club opposed the increase, but did not file any testimony or specific evidence regarding its position.¹⁸³

¹⁷⁸ Kentucky Power Post-Hearing Brief at 103.

¹⁷⁹ Owen Direct Testimony at 25.

¹⁸⁰ *Id.* at 26.

¹⁸¹ Joint Intervenors' Post-Hearing Brief at 14.

¹⁸² *Id.*

¹⁸³ Sierra Club Post-Hearing Brief at 2–3.

In establishing customer charges, the Commission uses the filed COSS as a guide and has generally supported a movement towards cost-based rates, in a measured and reasonable manner. In recent cases, the Commission expressed its concern about the demand/customer expense allocations for the distribution plant classifications and its preference for the zero-intercept method.¹⁸⁴ Furthermore, comparative studies between the minimum-size and zero-intercept methods suggest that the minimum system method produces a larger customer component.¹⁸⁵ However, the Commission acknowledges that on average, 34.02 percent of the bills issued by Kentucky Power are for usage over 1,300 kWh per month, yet there is no indication if these are low-income customers, and increases in the volumetric charge can skew this even further.¹⁸⁶ Therefore, the Commission finds the proposed customer charge of \$17.50 to be reasonable. This level of customer charge and the resulting reduction in the volumetric charge balances the interests of customers, particularly the significant number with excessive winter bills, with the utility's need for adequate cash flow and additional revenue independent of weather and other variabilities. This increase provides an additional \$5,611,032 annually of fixed revenue for the utility.¹⁸⁷ For a residential customer with an average monthly usage of 1,100 kWh, the average bill increases \$18.59, or 15.46 percent, from \$120.26 to

¹⁸⁴ See Case No. 2020-00131 *Electric Application of Meade County Rural Electric Cooperative Corporation For An Adjustment in Rates* (KY. PSC Sept 16, 2020), final Order at 12.

¹⁸⁵ *National Association of Regulatory Utility Commissioner's Electric Utility Cost Allocation Manual*, January, 1992, at 91.

¹⁸⁶ Kentucky Power's Response to Staff's Post-Hearing Request, Item 16.

¹⁸⁷ 1,603,152 residential test year billing determinants * \$3.50.

\$138.85.¹⁸⁸ Due to the TCJA surcredit of \$24.06 during the winter months, the average monthly bill in the winter will actually decrease to \$114.79 or (4.55) percent, and during the non-winter heating months a decrease will also be applied. In addition, due to the lower ROE applied to limited riders such as the Environmental Surcharge and Big Sandy Decommissioning Rider and the increase in the profit sharing from off system sales, residential customers will realize a further decrease in their average monthly bills.

Residential Declining Block Rate

Kentucky Power requested to establish a declining block rate for residential customers for those customers whose average monthly usage is above 1,100 kWh during the winter months of December, January, and February. Kentucky Power asserted that the current residential rate design over-allocates fixed cost recovery to high use customers, and the proposed winter block rate is designed to reduce the existing residential intraclass subsidy.¹⁸⁹ Kentucky Power stated that the winter heating block rate discount is worth \$14,605,655 during the winter months, but this discount is then collected from all residential customers throughout the entire year, including those who directly benefit from the winter block.¹⁹⁰

Kentucky Power claimed that the proposed winter declining block rate offers winter bill relief to low-income residential customers.¹⁹¹ In support of that assertion, Kentucky

¹⁸⁸ The total bill increase is higher than the overall increase to the residential class as the increase is not across the board to each rate component

¹⁸⁹ Vaughan Direct Testimony at 12–13; and Kentucky Power Post-Hearing Brief at 102.

¹⁹⁰ Vaughan Direct Testimony at 13; and Kentucky Power Post-Hearing Brief at 104.

¹⁹¹ Kentucky Power Post-Hearing Brief at 105.

Power stated that low-income energy assistance customers use 1,367 kWh/month versus 1,240 kWh/month for the residential class as a whole.¹⁹² However, Kentucky Power never offered evidence that low-income customers, in general, on Kentucky Power's system use more energy, only those customers who participate in that singular payment assistance program do.¹⁹³ In addition, although those benefiting from the declining block rate will pay back a portion of the \$14,605,655, nonelectric heating customer or low usage customer intraclass subsidies will increase. For the above reasons, the Commission denies the proposed residential declining block rate.

PROPOSED TARIFF CHANGES

Tariff Purchased Power Adjustment (PPA)

Pursuant to Tariff PPA, Kentucky Power currently recovers, among other things, 80.00 percent of the PJM Interconnection, LLC (PJM) load service entity (LSE) Open Access Transmission Tariff (OATT) charges above or below the amount established in base rates, with 20.00 percent of the charges credited to or collected from customers. Kentucky Power requested to recover 100.00 percent of the PJM LSE OATT charges instead of 80.00 percent, arguing that such expenses are Kentucky Power's largest growing expense, and that without a 100.00 percent recovery mechanism, Kentucky Power does not have an opportunity to earn its allowed ROE.¹⁹⁴

¹⁹² Vaughan Direct Testimony at 14.

¹⁹³ See, Vaughan Direct Testimony at 14; and Kentucky Power's Response to Staff's Seventh Request for Information (Staff's Seventh Request), Item 1.

¹⁹⁴ Vaughan Direct Testimony at 31–33; and Kentucky Power Post-Hearing Brief at 53–55 and 59.

Attorney General/KIUC witness, Mr. Kollen, testified that Kentucky Power's request was unreasonable because the primary reason for the increase in PJM LSE OATT expenses is transmission investment by other AEP operating companies and transmission companies, which are within the control of AEP.¹⁹⁵ According to Attorney General/KIUC witness, Stephen Baron, Kentucky Power ratepayers pay \$19,000,000 more in transmission costs allocated to Kentucky Power by AEP under a FERC-approved, AEP-designed allocation methodology than Kentucky Power's actual transmission costs.¹⁹⁶ The Attorney General/KIUC recommended that the Commission open an investigation into whether Kentucky Power should remain in the AEP East Transmission Agreement because Kentucky Power is allocated significantly greater expenses from AEP East Transmission zone that Kentucky Power would pay as a standalone transmission zone in AEP.¹⁹⁷

In response, Kentucky Power argued that recovering 100.00 percent of the PJM LSE OATT costs aids customers by avoiding more frequent base rate cases that would otherwise be filed to recover FERC-approved transmission costs that, under federal law, Kentucky Power is entitled to recover.¹⁹⁸ Kentucky Power claimed that PJM LSE OATT charges are "largely outside" of Kentucky Power control, due to investment decisions made by other transmission owners and regional transmission organizations.¹⁹⁹

¹⁹⁵ Kollen Direct Testimony at 52

¹⁹⁶ Direct Testimony of Stephen J. Baron (Baron Direct Testimony) at 17–18.

¹⁹⁷ Attorney General/KIUC Post-Hearing Brief at 51–52.

¹⁹⁸ Kentucky Power Post-Hearing Brief at 53–60.

¹⁹⁹ *Id.* at 57–58.

Because the 80.00 percent factor was established pursuant to a settlement and not a finding of the reasonableness of that discounted recovery, the Commission finds that Kentucky Power's request to recover 100.00 percent of the PJM LSE OATT expenses through Tariff PPA should be granted until the next rate case, when the issue will be re-examined. The Commission is allowing this change in the recovery amount only in an attempt to balance the impact to Kentucky Power's revenue and cash flow in response to the actual mitigation actions taken by the Commission in this case to help customers continue to afford service in Kentucky Power's territory. No party, and in particular the applicant in this case, should construe the Commission's decision on this issue as an indication that such a tracking mechanism will continue or is reasonable on a standalone basis. In fact, and as explained in greater detail below, in granting Kentucky Power's proposal on this issue the Commission is putting the utility on notice that its transmission planning and investment activities are not sustainable and must be substantively addressed in the near future. Failing to address the issues that face Kentucky Power's customers as a result of Kentucky Power's actions and the actions of its affiliates, will result in ever-increasing bills that based on recent experience will cause a severe impact on the tens of thousands of Kentuckians who have, do, and will continue to depend on Kentucky Power for life-sustaining service.

The Commission's concern regarding Kentucky Power's and AEP's activities related to transmission investment, control and ownership in Kentucky Power's territory is not remote or inconsequential. Other than the positions of president and COO, AEP and Kentucky Power share the same executives, including the same CEO, Nicholas

Akins.²⁰⁰ Kentucky Power has a statutory duty as a jurisdictional utility to provide adequate, efficient, and reasonable service to its customers. Furthermore, as Kentucky Power is well aware, it has been granted a state-determined certified territory where it is the monopoly provider of retail electric service.²⁰¹ In return for its obligation of service and monopoly protection against competition, Kentucky Power is afforded the right by law to “demand, collect and receive fair, just and reasonable rates for the services rendered.”²⁰² Over many decades Kentucky Power has built a transmission system throughout its territory in order to, primarily, satisfy its obligation of service under KRS Chapter 278. Although it may be axiomatic, the issues raised in this case requires the Commission to state the obvious: Kentucky Power owns Kentucky Power’s transmission system, not AEP. Although AEP or other affiliates may own other transmission assets in Kentucky other than Kentucky Power’s transmission system, those entities and “systems” are not utilities under Kentucky law.

For instance, in Case No. 2011-00042, the Commission found that an AEP subsidiary and Kentucky Power affiliate, AEP Kentucky Transmission Company, Inc. (KY Transco), does not provide utility service subject to the Commission’s jurisdiction, and thus does not have the same statutory obligation as Kentucky Power regarding the provision of service. KY Transco does not seem to be operated or controlled by any

²⁰⁰ Application, Section II, Filing Requirements Exhibit P, Page 17 of 256.

²⁰¹ KRS 278.016; See Case No. 2012-00224, *Petition and Complaint of Kentucky Power Company for a Declaration of Its Exclusive Right Pursuant to KRS 278.018(1) to Serve those Portions of the Sand Gap Estates in Greenup County, Kentucky Lying Within Its Certified Territory in Lieu of Grayson Rural Electric Cooperative Corporation* (Ky. PSC Apr. 1, 2014).

²⁰² KRS 278.030.

Kentucky-based individuals or entities. Nevertheless, Kentucky Power and KY Transco have executive officers in common, including the same CFO and the same CEO, again, Mr. Nick Akins.²⁰³ The Commission is concerned that AEP, not Kentucky Power, is exerting the ultimate authority over Kentucky Power's transmission system that is required to provide adequate service to Kentucky Power's retail customers. Recently the Commission explained one of its concerns in this regard, noting "that Kentucky Power, on its own volition or at the direction of another, plans to continue systemically [*sic*] transferring ownership of its transmission system in a piecemeal fashion under the auspices of the system's rehabilitation and replacement and under the cover of PJM's transmission planning processes, regardless of whether 'projects' are designated as baseline or supplemental."²⁰⁴ The Commission continued to explain in that matter that although it expressed the downside, or "grave concern" of allowing Kentucky Power to transfer functional control of its transmission system when joining PJM, today the reality is that Kentucky Power is "acquiescing to the transfer of actual ownership and control of its transmission system to affiliates for which Kentucky Power has no command and the Commission has no authority."²⁰⁵

Contrary to Kentucky Power's pleas otherwise, the Commission finds that a vast amount of the PJM LSE OATT expenses Kentucky Power incurs are not "largely outside" of the utility's control. Indeed, more than 90 percent of these expenses originate with

²⁰³ Hearing Transcript, PSC Staff Exhibit 1, AEP Kentucky Transmission Company, Inc. 2020 FERC Form 1, page 105.

²⁰⁴ Case No. 2020-00062, *Electronic Application of Kentucky Power Company for a Certificate of Public Convenience and Necessity to Construct a 138 kV Transmission Line and Associated Facilities in Pike and Floyd Counties, Kentucky* (Ky. PSC Dec. 29, 2020), Order at 27-28. The word should be "systematically" and not "systemically." This error will be corrected in Case No. 2020-00062.

²⁰⁵ *Id.* at 28.

entities who share a CEO and CFO with Kentucky Power. Furthermore, to the extent these expenses are allocated pursuant to a tariff or agreement, the record in this case is void of evidence of any attempt by Kentucky Power or its agents to try and minimize costs to its customers or independently ensure continued participation in those agreements are in the utility's or its customers' best interest. Instead, the record shows quite clearly that the only persons whom Kentucky Power depends on for transmission expertise or regulatory assistance have inherent conflicts in that they perform the same offerings to the Kentucky Power affiliates that are maximizing their profits as a result of the current scheme. PJM LSE OATT cost are not unavoidable for Kentucky Power, but by failing to address them in any reasonable manner, Kentucky Power has by design made them unavoidable for its customers. Therefore, as noted earlier in this Order, the Commission will grant Kentucky Power the opportunity to recover 100 percent of its incremental PJM LSE OATT expense for the next three years.

The Commission grants Kentucky Power's proposal in this regard while putting the utility on notice that it must address the burden these increasing expenses will represent to its dwindling customer base. Failure by Kentucky Power to take immediate steps to materially address this issue will force the Commission, whether it is through its statutory authority at the retail level or its advocacy at the wholesale level, to address these concerns itself. Further, to the extent Kentucky Power requires capital necessary to invest in its transmission system so the utility can maintain adequate service required by Kentucky law, the Commission expects that AEP will continue to provide sufficient capital to Kentucky Power. With the rates approved in this matter, we know AEP will ensure that Kentucky Power will have the capital made available to it in order to complete the entirety

of its necessary transmission investments in order to enable the utility to provide safe, adequate and reasonable service to its customers, rather than continuing the apparent practice discussed in the pendency of this matter of allocating, by default, a portion of Kentucky Power's transmission needs to a nonregulated affiliate.

Rockport Deferral Regulatory Asset

In Case No. 2017-00179, Kentucky Power was granted authority to establish a regulatory asset for the difference between the deferral of \$15,000,000 in Rockport UPA expenses, stipulated to be included in base rates until the Rockport UPA expires in 2022, and the declining actual deferral of \$10,000,000 in 2020 and \$5,000,000 in 2021 and 2022.²⁰⁶ The Order on rehearing stated that approval was not just for accounting purposes but was to reflect the future rate recovery of the deferred UPA costs.²⁰⁷ As part of this proceeding, Kentucky Power requested a five-year amortization period and authority to recover the amortization through Tariff PPA.²⁰⁸ The purpose of the Commission deciding the amortization period at a later date was to allow Kentucky Power's plans regarding the renewal of the Rockport UPA to become more certain. For instance, if Kentucky Power's proposed replacement capacity was more expensive than initially anticipated, a longer amortization period may be more reasonable so as to reduce the rate impact to customers. As demonstrated in the record, Kentucky Power was unable to confirm the amortization amount or the savings once the Rockport UPA terminates.²⁰⁹

²⁰⁶ Case No. 2017-00179, Jan. 18, 2018 Order at 37–40.

²⁰⁷ Case No. 2017-00179, Feb. 27, 2018 Order at 9.

²⁰⁸ Direct Testimony of Heather M. Whitney (Whitney Direct Testimony) at 34-36.

²⁰⁹ Hearing Transcript, Vol II at 581–582 and Vol. IV at 1149–1150; and Kentucky Power's Response to Commission Staff's Sixth Request, (Staff's Sixth Request), Item 1.

Therefore, the Commission finds that Kentucky Power's request to amortize the Rockport regulatory asset over five years beginning in 2022 for recovery through Tariff PPA is premature at this time, and the Commission will defer the determination of the appropriate amortization period and recovery mechanism to a subsequent matter the Commission will initiate on its own motion. As part of this subsequent matter, the Commission will also review and clarify items related to provisions of the final Order in Case No. 2017-00179 regarding Kentucky Power's ability to use the savings from the expiration of the Rockport UPA to earn its Commission-approved ROE in calendar year 2023.

Decommissioning Rider

Pursuant to the settlement agreement approved in Case No. 2014-00396,²¹⁰ Kentucky Power recovers the coal-related retirement costs of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2, and other site-related retirement costs through the Big Sandy Decommissioning Rider. These costs are recovered over a 25-year period on a levelized basis and include a weighted-average-cost-of-capital (WACC) carrying cost, which is adjusted with each base rate proceeding. The Decommissioning Rider Factor is updated annually each year with the Commission no later than August 15, and it goes into effect on October 1. The annual actual revenue requirement for the expense year for the Decommissioning Rider is allocated between residential and all other customers based upon their respective contribution to total retail revenues for the most recent 12-month period ending June 30. The Adjustment Factor for residential customers is calculated by dividing the net annual residential allocation, which would include any over- or undercollection from the most recent 12-month period ending June 30, by residential

²¹⁰ Case No. 2014-00396, June 22, 2015 Order.

retail revenue. The Adjustment Factor for all other classes is calculated by dividing the net annual all other allocation, which would include any over- or undercollection from the most recent 12-month period ending June 30, by all other classes nonfuel retail revenue.

Currently, Kentucky Power files the calculations, along with supporting spreadsheets, into the post-case file of its most recent completed general rate case no later than August 15 each year, with the new factor going into effect with bills issued in Cycle 1 of the October billing cycle. The information is reviewed by Commission Staff, who contact Kentucky Power if they have any questions. Currently, Kentucky Power's tariff does not contain the amount of the Decommissioning Rider factor. However, in response to Commission Staff's Fourth Request for Information, Item 17, Kentucky Power provided a tariff page reflecting the Decommissioning Rider factor amount. Because Kentucky Power committed to including the Decommissioning Rider factor in its tariff, all future filings should be submitted through the Commission's electronic Tariff Filing System no later than August 15 to become effective with bills issued in Cycle 1 of the October billing cycle.

Recently, the Commission evaluated riders and the associated financial risk. In Case Nos. 2020-00060²¹¹ and 2020-00061,²¹² the Commission noted that limited riders are relatively less risky and correlated ROEs are lower than rate case awarded ROEs. The Commission stated that:

²¹¹ Case No. 2020-00060, *Electronic Application of Kentucky Utilities Company for Approval of an Amended Environmental Compliance Plan and a Revised Environmental Surcharge* (Ky. PSC Sept. 29, 2020).

²¹² Case No. 2020-00061, *Electronic Application of Louisville Gas and Electric Company for Approval of an Amended Environmental Compliance Plan and a Revised Environmental Surcharge* (Ky. PSC Sept. 29, 2020).

The cost of equity is affected by the risk of shareholders not adequately recovering their investment, the risk associated with recovering the investment later than desired, and the risk from the shareholder receiving less than comparable investments.” To reduce shareholder risk, utilities can recover specified expenditures...with more certainty through specific riders. With a rider, since a return is guaranteed and the time line of recovery is known and ordinarily not meaningfully delayed, the required return is less than the ROE associated with a rate case as the risk involved is decreased and most lag associated with recovery is eliminated.²¹³

The final Orders in Case Nos. 2020-00060 and 2020-00061 also noted that, after removing ROE premiums, limited rider ROEs were 43 basis point below the January–June 2020 vertically integrated ROE average.²¹⁴ Consistent with the Commission’s statutory duty under KRS 278.183(2)(b) to establish a reasonable return on compliance-related capital expenditures, the Commission found in those proceedings that an ROE of 9.20 was a reasonable reflection of current economic conditions and investor expectations, as well as the fact that the award was for the propose of a limited rider. For the same reasons discussed above and because the ROE in the instant case was fully litigated and analyzed, the Commission therefore finds that, for the purpose of the Big Sandy Decommissioning Rider, an ROE of 9.10 will be applied to the equity component of the WACC carrying charges. This lower ROE and reduced risk of the Big Sandy Decommissioning Rider is evidenced in part by the yearly adjustments and ability to true up amounts.

NONREVENUE REQUIREMENT RIDERS AND TARIFFS

²¹³ Case No. 2020-00060, Sept. 29, 2020 Order at 20; and Case No. 2020-00061, Sept. 29, 2020 Order at 20.

²¹⁴ *Id.*

The following sections address riders and tariffs that have no immediate impact on Kentucky Power's revenue requirement.

Grid Modernization Rider and AMI CPCN

Kentucky Power requested a CPCN to purchase and install an AMI metering system to replace its current meters, along with a new Grid Modernization Rider (GMR) to recover capital and incremental O&M expenses associated with the AMI meters. Therefore, both the AMI CPCN and GMR will be discussed in this section.

Current Meter System. At the time of filing its application, Kentucky Power had 172,233 Automated Meter Reading (AMR) meters in its service territory.²¹⁵ First installed in 2005-2006, the AMR meters are equipped with an encoder receiver transmitter module, which allows Kentucky Power's meter readers to walk or drive by an AMR meter and electronically capture meter data via radio transmission, removing the need to manually check each meter.²¹⁶ The data captured is then transferred to the customer management system by a Standard Consumption Messaging (SCM) platform.²¹⁷

Kentucky Power stated that 74.60 percent of its existing AMR meters were between 10 and 15 years old, and thus nearing the end of their 15-year useful life.²¹⁸ Kentucky Power also stated that over the past three years, the AMR meters in the 10- to

²¹⁵ Direct Testimony of Stephen D. Blankenship (Blankenship Direct) at 2.

²¹⁶ *Id.*

²¹⁷ *Id.*

²¹⁸ *Id.* at 3.

15-year-old range experienced a failure rate of approximately 10 percent, a rate higher than expected that Kentucky Power believes will only grow as the meters get older.²¹⁹

Kentucky Power stated that the AMR meter used in its system are no longer manufactured by any vendor, and the SCM software platform is no longer supported by its developer, Itron.²²⁰ Kentucky Power explained that only one vendor supports AMR at the time, and that vendor supports only SCM+, a platform Kentucky Power does not have.²²¹ Kentucky Power asserted that, in order to continue utilizing AMR meters, Kentucky Power would have to replace its existing SCM platform with the SCM+ platform at an estimated cost of \$22,000,000 if Kentucky Power replaces failing AMR meters with SCM+ AMR meters instead of its proposed Advanced Metering Infrastructure (AMI) Meters.²²²

Proposed AMI System. Kentucky Power proposed to replace all existing AMR meters in its service territory with AMI meters over the period from 2021 to 2024.²²³ The AMI meters have the capacity to utilize two-way communications between the meter and Kentucky Power's central office instead of the one-way meter to reader communication capability of Kentucky Power's existing AMR meter infrastructure.²²⁴ Kentucky Power explained that the two-way communication of AMI meters allows for increased visibility

²¹⁹ *Id.* at 3-4; Hearing Transcript, Vol. IV, at 979.

²²⁰ Rebuttal Testimony of Stephen D. Blankenship (Blankenship Rebuttal Testimony) at R3-R4.

²²¹ *Id.* at R4.

²²² Hearing Transcript, Vol. IV at 984.

²²³ Blankenship Direct Testimony at 16-17.

²²⁴ Direct Testimony of Brian K. West (West Direct Testimony) at 13.

into the distribution systems which enables programs that are not currently available with AMR meters, discussed below.²²⁵

The estimated cost over the four years of deployment for the proposed AMI system is \$34,493,845 in capital costs and \$2,466,414 in O&M, for a total cash outlay of \$36,960,260.²²⁶

Grid Modernization Rider. Kentucky Power proposed to fund the cost of AMI deployment through a new GMR.²²⁷ The GMR would recover capital, including carrying costs, and incremental O&M expense associated with the rollout of AMI,²²⁸ as well as property taxes, depreciation, and a return on plant in service based on the cost of debt, return on common equity, and capital structure.²²⁹ In addition, the GMR would not terminate once the AMI project has been deployed. Kentucky Power proposed that the GMR be used to recover additional distribution grid modernization expenses approved by the Commission in future proceedings.²³⁰

Kentucky Power stated that, in the event that it were to file a base rate case prior to the completion of AMI deployment, it would propose to roll any GMR revenue requirement into base rates, after which any incremental costs going forward would

²²⁵ *Id.*

²²⁶ Blankenship Direct Testimony at 17. The one dollar difference between capital costs and O&M is due to Kentucky Power rounding.

²²⁷ West Direct Testimony at 9.

²²⁸ Blankenship Direct Testimony at 10.

²²⁹ *Id.*

²³⁰ *Id.* at 12.

continue to be recovered through the GMR going forward until included in base rates or the project was completed and all costs were recovered.

Depreciation – Proposed AMI System. Kentucky Power requested Commission approval for a 15-year depreciation for the proposed AMI meters and related communication equipment, as well as a 5-year depreciation period of the AMI-related software. Kentucky Power stated that it will propose depreciation rates for both AMI and AMR meters in its next base rate case.

Net Book Value of AMR System. The accumulated depreciation on Kentucky Power's existing AMR meters is \$10,710,344, with a remaining net book value of \$14,490,238.²³¹ The AMR meters are being depreciated over 15 years. Kentucky Power expects to continue depreciating the AMR meters until they are taken out of service, at which point the book cost of the unit would be credited to electric plant.²³² Kentucky Power also stated that it will propose a timeframe over which to recover the remaining net present value of the retired meter and associated infrastructure assets in the next base rate case.

Kentucky Power will not know the exact remaining net book value for the AMR meters until the proposed project is substantially completed because the existing meters continue to depreciate until the new system is fully deployed, which is expected to occur by January 2025.²³³

²³¹ Kentucky Power's Response to Attorney General/ KIUC's First Request, Item 65, Attachment 1.

²³² *Id.* at Item 63.

²³³ Kentucky Power's Response to Attorney General/KIUC's First Request, Item 62; and Hearing Transcript, Vol. IV at 1012

Projected Costs and Benefits. Kentucky Power, while it did not perform a formal cost-benefit analysis for the replacement of existing AMR meters with AMI meters, asserted that there is not a statutory requirement for a cost-benefit analysis for the approval of a CPCN,²³⁴ AMI meters are the industry standard and are needed to replace AMR meters nearing or at their useful service lives, with a high failure rate.²³⁵ Kentucky Power emphasized that it will soon be unable to provide reliable, adequate service due to the age and failure rate of its existing AMR meters.²³⁶ In addition, Kentucky Power asserted that customers would reap benefits in the form of the Flex Pay Program, discussed in this Order below, as well as benefits, including but not limited to faster reconnection, faster service restoration, remote identification of outages, as well as other customer centric benefits.²³⁷

Alternatives. Kentucky Power identified two alternatives to its proposed AMI system deployment: (1) replacing its existing AMR meters that operate on the outdated SCM platform with new AMR meters that operate on the SCM+ platform;²³⁸ and (2) replacing individual AMR meters as they fail with AMI meters.²³⁹

Kentucky Power argued that, under the first alternative, it would replace the obsolete AMR meters running on SCM with soon-to-be-obsolete AMR meters running on

²³⁴ Kentucky Power Post-Hearing Brief at 31.

²³⁵ *Id.* at 38.

²³⁶ Blankenship Direct Testimony at 3.

²³⁷ Kentucky Power Post-Hearing Brief at 42-45.

²³⁸ Blankenship Direct Testimony at 4-5.

²³⁹ West Direct Testimony at 15-16.

SCM+, at a cost of approximately \$22,000,000.²⁴⁰ Kentucky Power asserted that, when the SCM+ meters became obsolete, it would cost approximately \$37,000,000 to deploy AMI as proposed, leading to a total cost of \$59,000,000 under this proposal.²⁴¹ Kentucky Power opined that, based on AMI being the industry standard, it was likely that all AMR meters will become obsolete ahead of the end of the 15-year useful service life due to lack of manufacturer support or replacement parts.²⁴²

Concerning the second alternative, while it has not quantified an exact cost, Kentucky Power stated that the practice of replacing individual failing AMR meters with AMI meters in the normal course of business creates an additional financial burden as well as operational inefficiencies of having to simultaneously support both the SCM and AMI systems.²⁴³

Intervenor Arguments. The Attorney General/KIUC, Walmart, Joint Intervenors, and the Sierra Club each addressed the AMI CPCN and GMR in their witness testimony and briefs.

Attorney General/KIUC recommended denying both the AMI CPCN and the GMR. In their brief, the Attorney General/KIUC argued that the benefits that Kentucky Power attributed to implementing AMI meters were unsubstantiated because Kentucky Power did not conduct a cost-benefit analysis, and that any benefits attributed to AMI meters

²⁴⁰ Blankenship Rebuttal Testimony at R4.

²⁴¹ Hearing Transcript, Vol. IV at 984, 992.

²⁴² *Id.*

²⁴³ West Direct Testimony at 19.

have already been achieved using the existing AMR meters.²⁴⁴ Additionally, the Attorney General/KIUC argued that Kentucky Power did not provide sufficient evidence that the Commission can weigh to approve a multimillion dollar CPCN because Kentucky Power failed to identify the AMI model or vendor, relying instead on description of AMI meters installed in other AEP subsidiaries.²⁴⁵ Finally, the Attorney General/KIUC argued that, contrary to Kentucky Power's argument that the current AMR meters are obsolete, Kentucky Power has provided evidence that it has access to supplies of retired, but functional AMR meters from sister utilities that can be used to replace meters or components that fail, and at least one vendor that continues to manufacture the AMR meter used by Kentucky Power.²⁴⁶ For these reasons, Attorney General/KIUC argued there is no basis to conclude that the existing AMR system is in threat of imminent failure and can continue operation until Kentucky Power can provide a more thorough cost-benefit analysis.²⁴⁷

Regarding the GMR, the Attorney General/KIUC pointed out that if the AMI CPCN is denied, then there would not be a need for the GMR to recover costs for deploying AMI.²⁴⁸ However, if the Commission were to approve the AMI CPCN, the Attorney General/KIUC and their witness, Mr. Kollen, argued that the costs should be recovered in base rates and that the costs for new distribution have not been granted special

²⁴⁴ Attorney General/KIUC Post-Hearing Brief at 43.

²⁴⁵ *Id.*

²⁴⁶ Kentucky Power's Response to Attorney General/KIUC's First Request, Item No. 117.

²⁴⁷ Attorney General/KIUC Post-Hearing Brief at 43-44.

²⁴⁸ *Id.*

ratemaking recovery through riders between base rate cases.²⁴⁹ To the extent that Kentucky Power intended to use GMR to recover the future costs of projects, those costs have not been quantified.²⁵⁰ Mr. Kollen recommended that if the Commission approves the GMR, the costs recovered through the rider should be modified to reflect all savings in O&M expense, depreciation expense, ad valorem tax expense, and other expenses as reductions in the GMR revenue requirement.²⁵¹

Walmart does not take a position on the AMI CPCN, but recommended that if the CPCN is approved, Kentucky Power should recover the costs for AMI deployment in subsequent base rate cases.²⁵² Walmart's witness, Lisa V. Perry, argued that riders are more appropriate to recover costs that fluctuate from year to year, which does not apply to AMI costs, and in a base rate case, AMI costs can be balanced against any savings for ratemaking purposes.²⁵³ Walmart asserted that the GMR would place risk on ratepayers because they are paying for the AMI project as it is being constructed, before it is being used.²⁵⁴ Finally, Walmart argued that project costs are based on rough estimates from vendors who might be incentivized to downplay costs, and thus cannot be relied upon with sufficient confidence to justify approving a GMR for recovery of those costs.²⁵⁵

²⁴⁹ *Id.* and Kollen Direct Testimony at 59.

²⁵⁰ Attorney General/KIUC Post-Hearing Brief at 59.

²⁵¹ Kollen Direct Testimony at 60-61.

²⁵² Walmart Post-Hearing Brief at 3.

²⁵³ Perry Direct Testimony at 15-16.

²⁵⁴ Walmart Post-Hearing Brief at 4.

²⁵⁵ Hearing Transcript, Vol. IV at 1010.

The Joint Intervenors recommended that the Commission deny the AMI CPCN, arguing that Kentucky Power failed to demonstrate that replacing the existing AMR infrastructure would not constitute an excessive investment in relation to productivity of efficiency, and would not create an unnecessary multiplicity of physical properties.²⁵⁶ The Joint Intervenors recommended that if the Commission grants the CPCN, the GMR be rejected. The Joint Intervenors argued that the use of a rider that proposes only one project under the broad title of “grid modernization” imposes costs on ratepayers without demonstrating that the new infrastructure is useful or justifies the investment, especially in light of the fact that the anticipated benefits of the AMI infrastructure have not been quantified.²⁵⁷

Sierra Club did not oppose the AMI CPCN but urged the Commission to make any approval of the CPCN contingent on Kentucky Power taking actions, and instituting policies and programs, that maximize the realization of the efficiency and cost savings benefits that AMI theoretically poses.²⁵⁸ Sierra Club did not take a position with regard to the GMR.

Kentucky Power Response to Intervenors. In rebuttal to the Attorney General/KIUC, Kentucky Power argued that a cost/benefit analysis was unnecessary because it would be unreasonable to spend additional money on an obsolete and unsupported metering system, and that replacing the current system with another AMR

²⁵⁶ Joint Intervenors Post-Hearing Brief, at 16-21.

²⁵⁷ *Id.* at 21.

²⁵⁸ Sierra Club Post-Hearing Brief at 3.

system would cost ratepayers more money in the long-term.²⁵⁹ Kentucky Power disputed the viability of relying upon replacement parts for current meters from other utilities, contending that Attorney General/KIUC did not address the cost of such a solution or how long the replacement meters or parts would last.²⁶⁰ Kentucky Power also disputed that there is a vendor that supports the same AMR system Kentucky Power currently uses, noting that the vendor in question manufactures meters that operate on the SCM+ platform.²⁶¹ Kentucky Power testified that the cost to upgrade to such a platform would be approximately \$22,000,000.²⁶²

In rebuttal to the positions stated by Walmart, the Joint Intervenors, and the Sierra Club, Kentucky Power defended the GMR proposal, stating that, while the AMI project at hand is the most pressing issue, the need to update the grid will require more future projects and the GMR serves to allow Kentucky Power to more quickly implement them than if they were financed through base rates alone without sacrificing thorough oversight from the Commission.²⁶³

Legal Standard for a CPCN. The Commission's standard of review for a request for a CPCN is well settled. KRS 278.020(1) provides that no utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained

²⁵⁹ Blankenship Direct Testimony at 3-4; and Blankenship Rebuttal Testimony at R2.

²⁶⁰ *Id.* at R3.

²⁶¹ *Id.* at R3-R4.

²⁶² *Id.* at R4.

²⁶³ *Id.* at R4; Hearing Transcript, Vol. IV at 968.

a CPCN from this Commission. The utility must demonstrate a need for such facilities and an absence of wasteful duplication.²⁶⁴

“Need” requires a showing of substantial inadequacy of existing service due to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business.²⁶⁵

“Wasteful duplication” is defined as “an excess of capacity over need” and “an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.”²⁶⁶ To demonstrate that a proposed facility does not result in wasteful duplication, the Commission has held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.²⁶⁷ The fundamental principle of reasonable least-cost alternative is embedded in such an analysis. Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication.²⁶⁸ All relevant factors must be balanced.²⁶⁹

Discussion and Findings. Historically, the Commission has not issued a CPCN for meter replacement absent a cost-benefit analysis, but has on occasion approved meter

²⁶⁴ *Kentucky Utilities Co. v. Pub. Serv. Comm’n*, 252 S.W.2d 885 (Ky. 1952).

²⁶⁵ *Id.* at 890.

²⁶⁶ *Id.*

²⁶⁷ Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005).

²⁶⁸ See *Kentucky Utilities Co. v. Pub. Serv. Comm’n*, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, *Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of a 138 kV Electric Transmission Line in Rowan County, Kentucky* (Ky. PSC Aug. 19, 2005).

²⁶⁹ Case No. 2005-00089, *East Kentucky Power Cooperative, Inc.* (Ky. PSC Aug. 19, 2005), Order at 6.

replacement requests when the petitioners have provided the Commission with substantial evidence of extenuating circumstances, such as the obsolescence of existing systems, along with substantial evidence showing the proposed AMI systems were the reasonable least-cost alternative to address the utilities' metering needs.²⁷⁰

Based upon the case record, the Commission concludes that Kentucky Power has not provided adequate support for either the costs of its proposal or the alternatives, nor has it provided sufficient evidence that its proposal is the reasonable least-cost alternative. Kentucky Power provided a ballpark figure for an AMI system based upon costs for AMI systems tailored for other AEP affiliates that do not necessarily share the same service issues and characteristics as Kentucky Power. While estimates from affiliate companies may be useful for the initial planning phases, the Commission cannot approve a project of this magnitude without an actual projection of the cost based upon vendor proposals tailored for project needs that are specific to Kentucky Power. Whether the AMI was approved in this case or not, in order to move forward with the AMI project, Kentucky Power will have to issue an RFP to select a vendor, which could also provide information on possible alternatives. Finally, Kentucky Power provided no substantial

²⁷⁰ Case No. 2017-00419, *Application of Grayson Rural Electric Cooperative Corporation of Grayson, Kentucky, for Commission Approval Pursuant to 807 KAR 5:001 and KRS 278.020 for a Certificate of Public Convenience and Necessity to Install an Advanced Metering Infrastructure (AMI) System* (Ky. PSC July 16, 2018); Case No. 2016-00077, *Application of Licking Valley Rural Electric Cooperative Corporation for an Order Issuing a Certificate of Public Convenience and Necessity* (Ky. PSC Aug. 29, 2016); and Case No. 2014-00436, *Application of Nolin Rural Electric Cooperative Corporation for an Order Pursuant to KRS 807 5:001 and KRS 278.020 Requesting the Granting of a Certificate of Public Convenience and Necessity to Install an AMI System* (Ky. PSC Mar. 12, 2015). See also Case No. 2018-00005, *Electronic Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for Full Deployment of Advanced Metering Systems* (Ky. PSC Aug. 30, 2018) (denying without prejudice a CPCN for which the utilities failed to provide substantial evidence that, among other things, the proposed AMI system was a reasonable, least-cost alternative).

evidence to support its assertion that replacing its current system with another AMR system was not a reasonable alternative because AMR meters will become obsolete in the near term, and therefore Kentucky Power would have to install an AMI system before a replacement AMR system reached the end of its useful life.²⁷¹

For the above reasons, the Commission finds that the AMI CPCN should be denied without prejudice, and will require Kentucky Power to refile a CPCN application and provide evidence that its existing system is obsolete, along with exhibits documenting Kentucky Power's evaluation of multiple proposals filed in response to a RFP and the costs of the proposed system that is selected. The analysis of whether the AMI project is the least-cost alternative should include both capital and O&M costs. Kentucky Power should also demonstrate that the systems under consideration are effective in the terrain of its service territory. The Commission finds that the GMR should be also be denied.

Flex Pay Tariff

Kentucky Power proposed a new voluntary prepayment program, Flex Pay, which would allow customers to prepay for their electric service without incurring the costs of deposits or other fees associated with post pay accounts. The program would be available to all residential customers with an AMI meter rated up to 200 amps, except residential customers taking service under Tariff R.S.D., customers with certain medical or life-threatening conditions, customers on partial payment plans or budget payment plans, and customers with on-site generation operated in parallel with Kentucky Power's system.

²⁷¹ Hearing Transcript, Vol. IV at 984, 990-994.

Customers would be able to make deposits to their accounts in such amounts as are convenient to them. The initial deposit would have to be \$40 or more. The only requirement is that they maintain a positive balance. Customers would be able to choose a low balance amount that would trigger a notification from Kentucky Power. When the customer's balance reaches that amount, or \$25, whichever is greater, they would receive daily alerts until their account is restored above the low balance notification amount. Once a customer's account hits \$0, they will have until the beginning of the next business day to re-establish a positive balance.

A customer with an outstanding balance that signs up for the Flex Pay Program must pay at least 50.00 percent of the account balance, and can carry over up to \$1,500 of the account balance to their Flex Pay account. Any future deposits into the Flex Pay account will be split 80/20, with the 20.00 percent being applied to the arrears balance. Billing will be based on the customer's actual daily usage and fixed charges will be applied to the account on a daily basis.

Kentucky Power indicated that it would not be able to offer the Flex Pay Program if its request for AMI conversion was denied.²⁷² Because the Flex Pay Program cannot be implemented without the AMI conversion and the AMI CPCN has been denied, the Commission finds that proposed Flex Pay program should be rejected.

Kentucky Power also proposed a Bill Format for Flex Pay Customers. The bill format would not include the following information required by 807 KAR 5:006, Section 7(1)(a): specific line items for taxes and adjustments, as this would complicate the billing information and would be reflected in the customer's daily Flex Pay amount and balance;

²⁷² Kentucky Power's Response to Commission Staff's Fourth Request for Information, Item 28.

present and last preceding meter readings; date of the present meter reading; meter constant; gross amount of the bill; and the date after which a penalty may apply to the gross amount. Kentucky Power requested a deviation from 807 KAR 5:006, Section 7(1)(a), for the proposed Flex Pay Bill Format. The bill format would show billing information for each day. Because the Commission rejected the proposed Flex Pay Program, the Commission finds that the Flex Pay Bill Format should be rejected. Therefore, Kentucky Power's request for deviation is rejected as moot.

Tariff Net Metering Service I and II

Based upon the changes in Kentucky law resulting from Senate Bill 100, An Act Related to Net Metering, which took effect on January 1, 2020, Kentucky Power proposed to close the current Net Metering Service (NMS I) tariff as of January 1, 2020, and establish a new NMS tariff (Tariff NMS II).²⁷³ Kentucky Power stated that the proposed Tariff NMS II addresses the end of, or the reduction of, the intraclass subsidies the previous net metering statute produced by (1) changing the netting periods applicable to the monthly billing for customers; (2) changing the compensation rate paid for excess generation; (3) changing the cost recovery of payments made for Tariff NMS II customers' excess self-generation; and (4) changing the application fee to reflect the cost of processing an NMS application.²⁷⁴ Kentucky Power noted that the proposed Tariff NMS II comports with the requirements of KRS 278.466 as it applies only to customers whose eligible electric generating facility service begins after January 1, 2021, and all existing

²⁷³ KRS 278.465 and KRS 278.468.

²⁷⁴ Vaughan Direct Testimony at 23.

NMS customers will continue to be served under the existing NMS tariff for up to 25 years.²⁷⁵

The netting periods under the proposed Tariff NMS II consist of two time of use (TOU) periods, 8 AM to 6 PM and 6 PM to 8 AM, and for the billing period, all positive or negative net kWh²⁷⁶ will accumulate for that particular netting period. Net negative energy describes when, during a TOU netting period, a customer's generator produces an amount of energy that is greater than what the customer uses. Net positive energy depicts a situation when a customer's load is greater than what is self-generated during a TOU netting period. Any net positive energy or demand will be charged at the rates under the standard service tariff applicable to the customer. For all net negative energy, Kentucky Power proposed an avoided cost rate of \$0.03659 per kWh.²⁷⁷ In this initial calculation, the proposed avoided cost rate included the cost of service related avoided energy costs at Kentucky Power's marginal cost of energy, distribution losses, and avoided generation and transmission fixed costs. The proposed calculation did not include the societal cost of carbon, the value of the customer generators' renewable energy credits (RECs), nor other externalities as Kentucky Power contended that those items are not cost of service related.²⁷⁸ Kentucky Power also proposed to collect the avoided cost payments made to customers under Tariff NMS II for net negative energy

²⁷⁵ *Id.* at 24.

²⁷⁶ The proposed NMS II is also kW where applicable.

²⁷⁷ Vaughan Direct Testimony at 26. See Vaughan Direct Testimony, Exhibit AEV-3 for the complete calculation of the NMS II Excess Generation Pricing.

²⁷⁸ Vaughan Direct Testimony at 27.

credits through its PPA tariff.²⁷⁹ Kentucky Power asserted that the proposed Tariff NMS II results in a more appropriate fixed cost contribution towards Kentucky Power's cost of retail electric service and is consistent with the net metering act.²⁸⁰

The Attorney General/KIUC supported Kentucky Power's Tariff NMS II as proposed.²⁸¹ The Joint Intervenors, KYSEIA, and their witnesses, in their respective testimony and briefs, recommend denying the proposed rate and proposed establishing a separate proceeding with stakeholders and electric utilities to develop a methodology that is similar for all utilities, and based upon a cost of service study and cost-benefit analysis to determine appropriate dollar value for exports.²⁸² The parties also expressed concern that, by expanding their current systems or adding battery storage, existing net metered customers could lose their legacy status.²⁸³ Sierra Club did not file testimony in this case, explaining that its position aligns with testimony filed by the Joint Intervenors and KYSEIA.²⁸⁴

The Commission first notes that it is in the process of contracting with a consultant with experience in developing net metering rates. Relevant here, Kentucky Power did not conduct a cost of service study or provide any cost support for serving net metered

²⁷⁹ *Id.* at 28.

²⁸⁰ Vaughan Direct Testimony at 29.

²⁸¹ Attorney General/KIUC Post-Hearing Brief at 49–50.

²⁸² Direct Testimony of Justin R. Barnes (Barnes Direct Testimony) at 10–14, 16–18, and 20–21; Direct Testimony of James M. Van Nostrand (Van Nostrand Direct Testimony) at 2 and 12; Direct Testimony of Andrew McDonald (McDonald Direct Testimony) at 5–11; KYSEIA Post-Hearing Brief at 12–16; Joint Intervenors' Post-Hearing Brief at 4–13.

²⁸³ Direct Testimony of Benjamin D. Inskeep (Inskeep Direct Testimony) at 17–28; Van Nostrand Direct Testimony at 2–3, 15; KYSEIA Post-Hearing Brief at 16–19.

²⁸⁴ Sierra Club Post-Hearing Brief at 4.

customers. Instead, Kentucky Power proposed to use avoided cost as the basis for net metering rates. The Commission is not convinced by Kentucky Power's arguments that avoided cost should be the basis for establishing new net metering rates. Given that this is the first proceeding to propose new net metering rates consistent with the Net Metering Act, the Commission finds that its decision regarding net metering rates should be deferred to allow Commission Staff to work with its consultant to ensure that there is sufficient evidence to support the conclusion that Kentucky Power's proposed Tariff NMS II rates are fair, just and reasonable. Pursuant to KRS 278.190(2), Kentucky Power should file written notice with the Commission within 15 days of the date of this Order if Kentucky Power intends to place Tariff NMS II into effect as of January 14, 2021.

The Commission is cognizant that it must issue a decision on this issue on or before May 14, 2021, which is the statutory due date established by KRS 278.190(3). A procedural schedule will be issued by separate Order.

In regard to the Joint Intervenors and KYSEIA's requests to establish a separate proceeding to determine a methodology applicable to net metering rates, KRS 278.466(5) requires that net metering rates be established using ratemaking process established in KRS Chapter 278, such as this proceeding. The Joint Intervenors and KYSEIA's recommended process is not consistent with the express provisions of net metering statutes, and therefore the Commission will not grant their request.

Tariff SCC

Kentucky Power currently retains 25 percent of its OSS margins, which flow through Tariff SSC. Sharing mechanisms generally exist to provide an incentive to the utility to optimize a certain behavior, usually the reduction of an expense. When asked,

“Do you think that [no sharing] of the off-system sales clause between customers and the Company, no sharing with the Company, would change the Company's dispatch procedures or choices?” Kentucky Power’s witness responded, “No, because I think commercial operations does the best -- tries to make the best decision for customers regardless.”²⁸⁵ Because Kentucky Power participates in PJM’s energy market on an economic basis and the OSS margins are simply the outfall of its participation in PJM,²⁸⁶ the Commission finds that the OSS margins should not be shared between ratepayers and Kentucky Power. Therefore, the Commission finds that Kentucky Power’s Tariff SSC should be revised to reflect that all OSS margins are attributable to ratepayers.

Kentucky Power currently files its Tariff SSC update, along with supporting spreadsheets, into the post-case file of its most recent completed general rate case no later than August 15 each year, with the new amount going into effect with bills issued in Cycle 1 of the October billing cycle. The information is reviewed by Commission Staff, who contact Kentucky Power if they have any questions. Currently, Kentucky Power’s tariff does not contain the amount of the Tariff SSC factor. However, during the processing of this case, Kentucky Power provided a tariff page reflecting the Tariff SSC factor and committed to including the Tariff SSC factor in its tariff. Therefore, the Commission finds that all future filings should be submitted through the Commission’s electronic Tariff Filing System no later than August 15 to become effective with bills issued in Cycle 1 of the October billing cycle.

Demand Response Service

²⁸⁵ Hearing Transcript, Vol. III at 801-803

²⁸⁶ *Id.*; and Kentucky Power’s Response to Staff’s Fourth Request, Item 15.

Kentucky Power proposed a new Demand Response Service tariff (Rider D.R.S.) that will be a peak shaving tariff for the purpose of reducing its cost causing peaks. Customers that choose this new tariff cannot participate in PJM's Demand Response Capacity Program as it will reduce a customer's peak load contribution eligible for PJM capacity credit. The Demand Response Tariff will be similar to C.S. – I.R.P. but with new pricing, terms, and intended use. Customers would agree to 60 annual hours of interruptions in exchange for a monthly interruptible demand credit of \$5.50/KW. Customers would have to achieve at least 90.00 percent of their agreed upon interruptible capacity reservation during an event or be subject to an escalating repayment of its total annual discount, calculated based on the number of failures. Kentucky Power also proposed that the Commission allow them to defer the interruptible credits paid to Rider D.R.S. customers and recover the combined amount of Rider D.R.S. and Tariff C.S. – I.R.P. credits above the test-year level of Tariff C.S. – I.R.P. credits in the PPA tariff revenue requirement, as it currently does with the Tariff C.S. – I.R.P. credits.

The Commission finds that Rider D.R.S. is reasonable since it will allow Kentucky Power to reduce its cost causing peaks and that it should be approved. The Commission also finds that Kentucky Power should be allowed to defer the interruptible credits paid to Rider D.R.S. customers and recover the combined amount of Rider D.R.S. and Tariff C.S. – I.R.P. credits above the test-year level of Tariff C.S. – I.R.P. credits in the PPA tariff revenue requirement.

Electric Vehicle Charging

Kentucky Power proposed to add a provision to its residential tariff allowing customers to, through a separately wired time-of-use meter, take advantage of time-of-

use rates for their electrical vehicle charging load only. The on-peak and off-peak rates for such loads would be the same as those offered under the load management time-of-day and standard time-of-day provisions that are already in the residential tariff. Kentucky Power proposed to waive the extra basic service charge because the cost of the extra meter would be offset by the additional fixed cost contributions from the on-peak and off-peak energy charges. Based on the installed cost of a separate AMI meter, Kentucky Power stated that the net annual incremental fixed cost contribution of a customer taking advantage of the proposed electric vehicle charging provision is \$136.65.²⁸⁷ As discussed earlier in this Order, the Commission rejected Kentucky Power's request for a CPCN to begin converting to AMI meters. Using the standard time-of-day AMR meter cost of \$4.30 per month,²⁸⁸ the net annual incremental fixed cost contribution would be \$100.77. Kentucky Power indicated that customers currently charge their electric vehicles under their current rate schedules. The proposal would allow customers to charge their electric vehicles on a time of use rate without having to switch their whole house to such rates.²⁸⁹

Kentucky Power also proposed to modify the existing separate meter load management time-of-day provisions in Tariff G.S. and L.G.S to include EV charging.

Because the proposal is voluntary and customers are not required to go onto the load management time-of-day provisions of the respective tariffs to charge their electric

²⁸⁷ Kentucky Power's Response to Staff's Post-Hearing Request, Item 15.

²⁸⁸ Vaughan Testimony, Exhibit AEV-1, page 3 of 65.

²⁸⁹ Kentucky Power's Response to Staff's Fourth Request, Item 72.

vehicles, the Commission finds that the proposal is reasonable when utilizing AMR meters and that it should be approved.

Outdoor Lighting and Street Lighting

Kentucky Power proposed several revisions to its Outdoor and Street Lighting Tariffs. They have proposed the following:

- Add standard LED lamp offerings;
- Cease new installations of non-LED lamps but continue to repair existing non-LED lamps as long as it has replacement lamps and parts in inventory;
- Add a conversion charge for customers with working non-LED luminaire who wish to convert to LED; and
- Add a flexible lighting option that gives customers options beyond the standard offerings in the tariff.

Kentucky Power indicated that it received numerous inquiries regarding LED lighting. Kentucky Power argued that LED lights will provide customers with a better light, more attractive color temperature options and reduced monthly energy consumption and associated energy cost. In addition, they state that LED technology will be more compatible with future technology enhancements to the system.²⁹⁰ LED lighting has become much more prevalent in recent years. The Commission finds that the addition of LED lamp offerings is reasonable as LED lighting is becoming more prevalent and that the addition of LED lamp offerings should be approved.

Kentucky Power also indicated that it is becoming increasingly difficult to obtain traditional lighting technologies in sufficient volumes and at a reasonable cost. Therefore,

²⁹⁰ Vaughan Direct Testimony at 20.

Kentucky Power is proposing to cease new installations of non-LED lamps. However, Kentucky Power will continue to repair existing non-LED lamps as long as it has replacement lamps and parts in inventory. Given the move to LED technology and the difficulty in obtaining non-LED technologies, the Commission finds that ceasing new installations of non-LED lamps is reasonable and that it should be approved.

Kentucky Power proposed to add a conversion charge for customers with functioning non-LED luminaires who wish to convert to LED technology in order to recover the average remaining book value of the non-LED luminaire. The charge would be collected over 84 months. The charge would not apply if the ballast or housing of the existing non-LED luminaire fails or the existing luminaire is out of stock. The Commission finds that it is reasonable for Kentucky Power to recover the average remaining book value of the non-LED luminaire when a customer with a functioning non-LED luminaire requests to convert to LED technology and that the conversion fee should be approved.

Kentucky Power proposed to add a flexible lighting option to the tariff to give customers options beyond the standard offerings in the tariff. The rate design for the flexible lighting option will include a monthly lamp charge for the system, a monthly maintenance charge, a non-fuel energy charge, a base fuel charge and all applicable adjustment clauses. The lamp charge will be computed using the same monthly levelized fixed cost rate used to compute the cost based lamp charges in Kentucky Power's standard lighting options. The monthly maintenance charge is based on an average of Kentucky Power's monthly maintenance charges for its LED lighting options. The nonfuel charge is the same rate used to compute the cost based lamp charges for its LED lighting

options. Kentucky Power indicated that customers choosing the flexible payment option could pay part of the installed cost up front in order to reduce their monthly lamp charge.²⁹¹

Kentucky Power filed a revised cost estimate for each Rate OL LED option. The revision reduced the average estimated monthly maintenance cost from \$1.20 per month to \$0.80 per month.²⁹² For the Rate SL LED option, Kentucky Power proposed a monthly maintenance cost of \$2.23 while the average estimated monthly maintenance cost was \$2.52 according to their cost justification.²⁹³

Because the rate design is similar to rate design for Kentucky Power's standard OL and SL offerings, the Commission finds that the proposal is reasonable and that it should be approved with language added indicating that customers can pay part of the installed cost upfront in order to reduce the monthly lamp charge component of the rate. The Commission also finds that the amount of the monthly maintenance charges in the flexible lighting options should be adjusted to reflect the amounts reflected in their cost justification. The Commission further finds that the monthly non-fuel energy charge per kWh under the flexible lighting options should be revised to \$0.05517 for Tariff OL and \$0.04391 for Tariff SL to account for the lower revenue requirement approved herein. Finally the Commission finds that the monthly levelized fixed charge rate under the flexible lighting options should be revised to 1.36 percent under Tariff OL and 0.97 percent under Tariff SL to account for the revised rate of return.

Tariff EDR

²⁹¹ Kentucky Power's Response to Staff's Fourth Request, Item 78.

²⁹² Kentucky Power's Response to Commission Staff's Fifth Request for Information (Staff's Fifth Request), Item 5(a), Attachment 1.

²⁹³ Kentucky Power's Response to Staff's Fourth Request, Item 13, Attachment 2.

Kentucky Power proposed to revise Tariff E.D.R. to allow customers to choose the order in which they receive their contractual discounts. The timing of the discounts would be set out in the contract and submitted to the Commission for approval. Kentucky Power argues that the proposed change would make the tariff more attractive to customers seeking to relocate or expand in Kentucky Power's territory, thus aiding its economic development efforts. The Commission has concerns that allowing a customer to choose the order of discount could result in Kentucky Power receiving less in revenue than if the order of discounts remained as is in the current tariff, especially if the customer chooses the larger discounts to be in the years their load is the largest. However, because Kentucky Power will still be required to show that the discounted rates exceed the marginal cost associated with serving a customer over the entire discount period when seeking Commission approval of an EDR contract, thus holding Kentucky Power's remaining customers harmless, and in order to assist economic development in Kentucky Power's service territory, the Commission finds that the revision is reasonable and should be approved.

Tariff FAC

Kentucky Power proposed to update Tariff F.A.C. to include PJM billing line item 1999 (BLI 1999) as a category of fuel costs recoverable through the FAC.²⁹⁴ Kentucky Power argued that as a member of PJM, it is required to pay all costs billed by PJM and is entitled to all revenues earned through its participation. It stated that retail ratepayers

²⁹⁴ Direct Testimony of Scott E. Bishop (Bishop Direct Testimony) at 6; and Whitney Direct Testimony at 25. Kentucky Power proposed to remove BLI 1999 cost from the test year ended March 31, 2020 amount of \$150,650 (retail jurisdictional amount). The recovery of the total \$357,829 in default costs was proposed to be amortized over a three year period and resulted in an annual amortization expense of \$117,487.

benefit through their share of off system sales margins as well as revenues earned by Kentucky Power for the provision of transmission service, which reduces the cost of providing retail electric service. Kentucky Power argued that, because retail ratepayers receive the benefits of its participation in PJM, it is appropriate to reflect the costs of participation in retail rates.²⁹⁵

Currently, default expenses are recovered through either base rates or the system sales clause. The Commission finds that the recovery of BLI 1999 charges through the FAC should be denied, for the reasons discussed below, and that these charges should continue to be recovered through base rates and Tariff SSC. Although there have been default expenses other than GreenHat, which was an exception in its magnitude, the expenses were not extraordinary.²⁹⁶ In addition, FAC proceedings allow electric utilities to recover the difference between fuel costs in the base period and current period. While electric utilities can include financial transmission rights (FTR) in FAC proceedings, FTR expenses are not fuel costs. BLI 1999 are not FTR expenses; they are remote expenses associated with FTRs, representing third party liquidated positions allocated to Kentucky Power. For these reasons, the Commission concludes that BLI 1999 charges should continue to be recovered through base rates and Tariff SSC, and not through FAC proceedings. Additionally, even though Kentucky Power explained in Case No. 2020-00034²⁹⁷ that a portion of the BLI 1999 charges would be allocated to OSS through Tariff

²⁹⁵ Kentucky Power's Response to Staff's Fourth Request, Item 21.

²⁹⁶ *Id.* at Item 20.

²⁹⁷ Case No. 2020-00034, *Electronic Application of Kentucky Power Company for an Order Approving Accounting Practices to Establish a Regulatory Asset Related to the Extraordinary Expenses Incurred by Kentucky Power Company in Connection with Charges Related to GreenHat Energy, LLC Default* (Ky. PSC Sept. 30, 2020).

SSC and the historic period was allocated to OSS, Kentucky Power did not allocate a portion of the estimated expenses from April 2020, to December 2020. Using the average allocation to OSS during the actual period of 14 percent, \$16,552 should be allocated to the OSS margins and removed from base rates. With the change that 100 percent of OSS margins will flow through Tariff SSC, the total amount billed to customers would remain the same without the additional allocation; however, the FAC base fuel amount would be understated and the SCC margins would be overstated by the same amount, adding an additional layer of complexity to the review process for these mechanisms. Thus, the Commission will include \$101,155 in base rates and \$16,451 in the system sales clause, on a jurisdictional basis.

The Commission notes that the issue will be examined further if PJM and its members continue to have problems monitoring and policing its markets, ensuring that adequate participant reserves are in place to protect the integrity of market positions and passing new extraordinary default charges through BLI 1999.

Tariff C.S. – I.R.P.

Kentucky Power proposed to eliminate the expiring special coal provisions in Tariff C.S. – I.R.P. The special coal provisions allowed for customers engaged in the extraction or processing of coal to provide interruptible load of at least 1 MW at a single site and commit to a minimum two year contract term instead of the four year contract term for other customers under Tariff C.S. – I.R.P. Kentucky Power stated that the provisions are difficult to manage and are no longer necessary as the proposed Demand Response Tariff contains a one year contract period for customers willing and able to interrupt their load requirements in return for demand-based bill credits.

Kentucky Power also proposed revisions to make the language in Tariff C.S. – I.R.P. consistent with PJM’s Load Management Resource Product – Capacity Performance Demand Response requirement, add language to the tariff that was in previously Commission approved C.S. – I.R.P. contract addenda, and remove language that already appeared in Tariff I.G.S., under which C.S. – I.R.P. customers take service.

Because customers engaged in the extraction or processing of coal will be able to provide interruptible load under the new Demand Response tariff under a 1 year contract, the Commission finds that the removal of the special coal provisions from C.S. – I.R.P. is reasonable and that it should be approved. As the remaining revisions were just for clarification, the Commission finds them reasonable and that they should be approved.

Underground Service Tariff

Kentucky Power proposed revisions to its Underground Service tariff to add cities and towns to the list of entities that can request underground service. If a city or town is the entity requesting underground service, Kentucky Power proposes to collect the estimated underground cost differential from the residents of the city or town requesting such service through a separate line item on the bill. Kentucky Power is also proposing to add language regarding situations where a city or town requires the installation of underground facilities or the relocation of overhead facilities underground pursuant to a municipal or other governmental requirement or directive. In such cases, Kentucky Power is proposing to collect such costs from the customers within the boundary of the municipality or governmental entity requiring such service.

Kentucky Power indicates that its preferred method of recovery of such costs would be directly from the city or town. However, if the city or town were unable to pay

the upfront cost, Kentucky Power would then add the costs either to the franchise fee billing line item or a new billing line item of the customer bills in that city or town. Kentucky Power indicated that they would notify such customers through bill messages, its website, and social media.²⁹⁸ Kentucky Power indicated that it would be willing to create payment arrangements directly with the cities or towns to recover the costs instead of recovering them through a franchise fee billing line item as originally proposed.²⁹⁹

The Commission believes that these issues should be addressed in franchise agreements and the Commission's authority regarding franchises is limited by statute to finding only whether there is a need and demand for the service sought to be rendered, no finding or determination is made as to the qualifications of the bidder, the validity of any of the provisions of the franchises offered by said city, or the manner in which any franchise fees are to be treated for rate purposes. Therefore, for the reasons discussed above, the Commission finds that the revisions should be rejected.

Tariff Non-Utility Generator (NUG)

Kentucky Power proposed to close Tariff NUG for new participants and remove provisions for commissioning power service and startup power service. Due to pending litigation at the Kentucky Court of Appeals regarding this tariff,³⁰⁰ the Commission finds that the proposal should be denied.

Tariff Cogen/SPP

²⁹⁸ Kentucky Power's Response to Staff's Fourth Request, Item 6.

²⁹⁹ Kentucky Power's Response to Staff's Fifth Request, Item 4(a).

³⁰⁰ *Riverside Generating Co. LLC v. Pub. Serv. Comm'n, Ky.* App Case No. 2020-CA-0678 (filed June 11, 2020).

In Case No. 2000-00279,³⁰¹ Kentucky Power was permitted to deviate from the filing requirements of 807 KAR 5:054, Sections 5(1)(a) and (2), which relate to the filing of avoided cost data with the Commission. That deviation was reversed in Case No. 2020-00134,³⁰² and the Commission also found that “the reasonableness of Kentucky Power’s cogeneration tariffs, particularly as they relate to the avoided cost data filed in this proceeding, will be adjudicated in Case No. 2020-00174.” Kentucky Power proposed to revise its avoided capacity cost rates based upon a hypothetical incremental dispatchable generation addition.³⁰³ It used an estimated cost of an F class combustion turbine natural gas generating plan based on the AEP System new generation technologies key supply-side resource option assumptions from its most recent IRP filing.³⁰⁴ Kentucky Power proposed to revise its avoided energy cost rates based on a four year average of forward pricing for the Kentucky Power residual load aggregate.³⁰⁵ Kentucky Power argues that its generation resources are not dispatched to meet load requirements, but instead are dispatched against PJM’s locational marginal price (LMP) prices.³⁰⁶ Therefore, Kentucky Power argued that its marginal/avoided cost of energy is the PJM LMP for Kentucky Power’s residual load aggregate.³⁰⁷

³⁰¹ Case No. 2000-00279, *Request of Kentucky Power Company D/B/A American Electric Power for Deviation from 807 KAR 5:054, Section 5(1)(a) and (2)* (Ky. PSC Aug. 4, 2000).

³⁰² Case No. 2020-00134, *Electronic Investigation of Kentucky Power Company’s Deviation from 807 KAR 5:054, Section 5(1)(A) and (2)* (Ky. PSC June 1, 2020).

³⁰³ Kentucky Power’s Response to Staff’s Fourth Request, Item 111.

³⁰⁴ Kentucky Power’s Response to Staff’s Fourth Request, Item 94.

³⁰⁵ Kentucky Power’s Response to Staff’s Fourth Request, Item 102.

³⁰⁶ Kentucky Power’s Response to Staff’s Fifth Request, Item 18(a).

³⁰⁷ *Id.*

KYSEIA's witness, Justin R. Barnes, proposed that instead of using a capital cost of \$700 per kW to calculate the avoided capacity rate, Kentucky Power should use the amount from PJM's Cost of New Entry (CONE) of at least \$799 per kW.³⁰⁸ In addition, Mr. Barnes argued that since PJM uses a 20-year useful life in its CONE calculation for the same type of generating unit Kentucky Power uses, Kentucky Power should also use a 20-year useful life in its calculation.³⁰⁹ Mr. Barnes also proposed that the Cogen Tariffs be revised to specify that QFs may seek a contract with pricing based on rates at the time of the establishment of a legally enforceable obligation (LEO) and specify the length of time that a QF may provide energy and capacity under a locked-in rate, which it argued should be at least ten years.³¹⁰

Kentucky Power argued that the avoided cost calculation should be consistent with the methodology so that favorable values from different methodologies are not combined in a piecemeal fashion.³¹¹ Kentucky Power stated that, while it continues to support its proposed simplified hypothetical CT calculation, the Commission has ultimate discretion as to the avoided cost methodology. Kentucky Power argued that because the Public Utility Regulatory Policies Act (PURPA) does not require Kentucky Power to fix avoided cost rates for any period, Mr. Barnes' recommendation to require fixed rates for a minimum term of ten years is inconsistent with FERC Order 872 and the Commission's

³⁰⁸ Direct Testimony of Justin R. Barnes (Barnes Direct Testimony) at 48.

³⁰⁹ *Id.*

³¹⁰ Barnes Direct Testimony at 47.

³¹¹ Vaughan Rebuttal Testimony at 44-45.

regulations. Kentucky Power also stated that its tariff should be updated to reflect the avoided cost methodology chosen by the Commission and FERC Order 872, which reduced the purchase obligation threshold from 20 MW to 5 MW, subject to FERC approval.³¹²

Discussion and Findings. PURPA is a “program of cooperative federalism that allows the States, within limits established by federal minimum standards, to enact and administer their own regulatory programs, structured to meet their own particular needs.”³¹³ FERC Order 872 and 872-A revised FERC’s regulations implementing PURPA. To account for the significant development of energy markets, FERC established a rebuttable presumption that locational marginal prices (LMPs) may reflect a purchasing electric utility’s avoided energy costs and allowed states the ability to require variable energy rates.³¹⁴ FERC also retained the option granted to QFs to fix their capacity rates for the term of their contracts at the time the LEO is incurred,³¹⁵ and clarified that a QF must demonstrate commercial viability and a financial commitment to construct its facility pursuant to objective and reasonable state-determined criteria before the QF is entitled to a contract or LEO.³¹⁶ FERC has declined to specify a minimum required contract length and stated that “it is up to states to decide appropriate contract lengths in

³¹² *Id.* at 43–44. See revised Vaughan Rebuttal Testimony (filed Nov. 23, 2020).

³¹³ See *FERC v. Miss.*, 456 U.S. 742, 767 (1982).

³¹⁴ FERC Order No. 872 at 8 and 18.

³¹⁵ *Id.* at 27.

³¹⁶ *Id.* at 45. “States may not impose any requirements for a LEO other than a showing of commercial viability and a financial commitment to construct the facility.”

a way that accurately calculates avoided costs so as to meet all statutory requirements.”³¹⁷

The Commission chooses to avail itself of the new capability to require variable energy rates and finds that the avoided energy rate should be the variable LMP at time of delivery. This will eliminate any forecast error from Kentucky Power’s avoided energy rate and place the risk of economic feasibility on the QF instead of Kentucky Power’s ratepayers. The Commission also finds that the avoided capacity rate should be the zonal net CONE for the delivery years that have an established CONE at the time of the contract and the last known net CONE for the remainder of the term. This will balance the interests of Kentucky Power and the QF by enabling QFs to estimate the avoided capacity rates from publically available documents and providing a market based capacity value specific to Kentucky Power’s location. The Commission also finds that Kentucky Power’s current minimum term of one year may discourage QFs from locating in its service territory and will therefore lengthen the minimum agreement term to five years. While longer minimum agreement periods shift risk to ratepayers, the variable energy rates will alleviate some of these concerns. The Commission further finds that the LEO requirements should be set by regulation, because they should apply to all utilities equally. Therefore, the Commission will not dictate LEO requirements at this time. Finally, the Commission will still allow utilities and QFs, if they choose, to have agreements different than the tariff, subject to the Commission's approval.

For small power production facilities, but not cogeneration facilities, FERC also revised the threshold for the rebuttable presumption that a QF with a net capacity of less

³¹⁷ *Id.* at 206.

than 20 MW lacks nondiscriminatory access to markets from 20 MW to 5 MW, for the purposes of determining the electric utility's purchase obligation.³¹⁸ Utilities for which FERC has already granted relief from the mandatory purchase obligation for small power production facilities over 20 MW must reapply with FERC to request relief from the mandatory purchase obligation for small power production facilities between 5 MW and 20 MW.³¹⁹

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that Kentucky Power's Tariff Cogen/SPP should be revised to (1) reflect an avoided energy cost rate based on the variable LMP at the time of delivery; (2) reflect an avoided capacity cost rate based on the zonal net CONE for the delivery years that have an established CONE at the time of the contract and the last known net CONE for the remainder of the term; (3) specify that a QF can request that avoided cost rates be set on an "as available" basis or when the QF has established a LEO; and (4) specify that the minimum contract term is five years. Additionally, if Kentucky Power is granted approval by FERC to reduce its purchase obligation for small power production facilities, Kentucky Power should revise its tariff to reflect that approval.

Tariff Language Change

Equal payment plan to nonresidential customers. Kentucky Power proposed to offer its Equal Payment Plan to nonresidential customers when mutually agreeable. Kentucky Power indicated that nonresidential customers are eligible for the Equal

³¹⁸ *Id.* at 45.

³¹⁹ *Id.* at 356.

Payment Plan if the customer's account is current and it meets the satisfactory credit criteria for nonresidential customers in the deposit section of the tariff.³²⁰ Commission regulation 807 KAR 5:006, Section 14(2)(a)2, requires that utilities offer budget payment plans to residential customers and also allows such plans to be offered to other classes of customers. Therefore, the Commission finds that the proposal is reasonable, but that language should be added to the Equal Payment Plan section of the tariff specifying the requirements a nonresidential customer must meet to be eligible for the Equal Payment Plan. As a similar provision is contained in the Average Monthly Payment Plan section of the current tariff, the Commission finds that language should be added to that section of the tariff specifying the requirements a nonresidential customer must meet to be eligible for the Average Monthly Payment Plan.

Allow verbal request by customers for meter test. Kentucky Power proposed to allow customers to submit a verbal request to a Customer Service Representative for a meter test. The current tariff only allows customers to request a meter test upon written request. Commission regulation 807 KAR 5:006, Section 19, requires a utility to make a test of a meter upon written request of a customer as long as the request is not made more frequently than once every 12 months.

The Commission is concerned that allowing customers to verbally request a meter test increases the likelihood that regulatory requirements to maintain adequate documentation and to inform customers of their rights and responsibilities would not be followed. For example, pursuant to 807 KAR 5:006, Section 9(3)(f), and 807 KAR 5:041, Section 19(1)(b), a customer may be charged if, after requesting a meter test, the meter

³²⁰ Kentucky Power's Response to Staff's Fourth Request, Item 4.

is found to be within the regulatory accuracy limits. Pursuant to 807 KAR 5:006, Section 10(4)–(5), a utility must provide notice to a customer of their right to file a complaint with the Commission if the customer’s complaint is not resolved by the utility. Here, Kentucky Power did not provide evidence how it would ensure that customers’ rights are protected. Therefore, for the reasons discussed above, the Commission finds that the revision should be rejected.

Revisions to franchise tariff regarding notice of expansion of municipal government boundaries. Kentucky Power proposed two revisions to its Franchise Tariff. The first revision addresses situations when Kentucky Power is required to install underground facilities or relocate overhead facilities underground pursuant to a municipal or other governmental requirement or directive. Under such a situation, Kentucky Power proposed to charge the customers within the boundary of that municipality or governmental entity for the costs related to the installation or relocation via the current franchise fee billing line item or a new billing line item.

The second revision requires cities and towns to timely notify Kentucky Power of any expansion of the city’s or town’s boundaries through annexation and to provide a new map of the city’s or town’s boundaries at the time notice is made. Once the notice is made, Kentucky Power would begin billing the applicable charges within 30 days.

The Commission concludes that these issues should be addressed in franchise agreements and the Commission’s authority regarding franchises is limited by statute to finding only whether there is a need and demand for the service sought to be rendered, no finding or determination is made as to the qualifications of the bidder, the validity of any of the provisions of the franchises offered by said city, or the manner in which any

franchise fees are to be treated for rate purposes. Therefore, for the reasons discussed above, the Commission finds that the revisions should be rejected.

Add delayed payment charge to Tariff T.S. and M.W. Kentucky Power proposed adding its delayed payment charge to its Temporary Service Tariff (Tariff T.S.) and Municipal Waterworks Tariff (Tariff M.W.). Because the Commission is allowing Kentucky Power's delayed payment charge for commercial and industrial customers to continue, the Commission finds that the proposal to add the delayed payment charge to Tariff T.S. and Tariff M.W. should be approved. While Tariff T.S. is also available to residential customers, its use by residential customers appears to be infrequent based on the total number of occurrences during the test year.³²¹

Change requirements from "normal" maximum demand to "average" maximum demand in Tariff G.S., M.G.S. -T.O.D., Tariff L.G.S., Tariff L.G.S.-T.O.D., Tariff I.G.S., Tariff C.S. – Coal, Tariff C.S. – I.R.P., Rider A.F.S. Kentucky Power proposed to revise the Availability of Service section of several rate schedules to change the requirements for those rate schedules from normal maximum demand to average maximum demand. Kentucky Power indicated that it proposed the revisions because average is a more easily defined term than normal. The Commission finds that the term average is more easily defined than normal and that the revisions be approved.

Delayed Payment Charge

Kentucky Power assesses most customers who pay their bill after the due date a delayed payment charge of 5.00 percent. This fee is intended to elicit customer behavior,

³²¹ Kentucky Power's Response to Staff's Post-Hearing Request, Item 5, Attachment 1.

is not cost based, and creates a hardship on customers that are already unable to timely pay for service. The evidence collected in Case No. 2020-00085,³²² including evidence related to Kentucky Power that was discussed at the hearing in this matter, challenged the efficiency of delayed payment charges to certain customers. In the response to the Commission's Request for Information in Case No. 2020-00085, the data provided by Kentucky Power demonstrated that the on time pay percentage for residential customers remained fairly steady and even increased during certain months that the required waiver of late payment fees was in effect. In that same response, the data provided by Kentucky Power demonstrated that the on time pay percentage for commercial and industrial customers decreased during the months that the required moratorium on late payment fees was in effect.³²³

Kentucky Power stated that its delayed payment charge is cost-based, citing its accounts receivable factoring expense of \$3,800,926 during the test year.³²⁴ Due to its almost instantaneous sale of accounts receivable for all customers, there is no evidence that there are costs imposed on all customers for some paying their bills late. While Kentucky Power does sell its accounts receivable at a discount, the discount reflects the time value of money and transaction fees for all customers, not just those paying late. In addition, Kentucky Power participates in the Residential Energy Assistance program,

³²² See Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (filed Sept. 21, 2020) Kentucky Power's Supplemental Response to Commission Staff's Initial Request for Information, Item 9.

³²³ *Id.*

³²⁴ Kentucky Power's Response to Staff's Post-Hearing Request, Item 5(j).

whose purpose is to reduce bad debt expenses which benefits all customers.³²⁵ Discontinuing the delayed payment charge for residential customers would allow for smaller write-offs based upon actual cost based sales.

As the evidence indicates, the delayed payment charge does not appear to have the intended impact on residential customers' behavior, the Commission finds that it is not reasonable for Kentucky Power to continue to collect delayed payment charges from residential customers. Therefore, the Commission reduces the test year delayed payment charge revenue by \$2,458,312, which is the amount attributable to residential customers, so that Kentucky Power can receive the income through its base rates and the Commission finds that the assessment of delayed payment charges to residential customers should be discontinued.

Nonrecurring Charges

Following the Commission's recent decision set out in the final Order in Case No. 2020-00141,³²⁶ the Commission finds that the calculation of non-recurring charges should be revised and only the marginal costs related to the service should be recovered through a special nonrecurring charge for service provided during normal working hours. In Case No. 2020-00141, the Commission found that because personnel are paid for work performed during normal business hours regardless of whether they are on a field visit, labor costs included in nonrecurring charges that occur during regular business hours

³²⁵ See Case No. 2019-00366, *Investigation of Home Energy Assistance Programs Offered by Investor-Owned Utilities Pursuant to KRS 278.285(4)* (Ky. PSC May 4, 2020), Order at 3 (The primary benefit of home energy assistance programs is, "a reduction in utility costs, and thus a reduction in rates as a result of avoided costs that would otherwise be incurred from debt collection and from writing off uncollectible accounts.").

³²⁶ Case No. 2020-00141, *Electronic Application of Hyden-Leslie County Water District for an Alternative Rate Adjustment* (Ky. PSC Nov. 6, 2020).

should be eliminated. By reflecting only the marginal cost of the service in nonrecurring charges, Kentucky Power’s rates will be more in line with the principle of cost causation. Merely allocating a fixed expense of ordinary labor costs in special nonrecurring charges like reconnect, termination/field trip, and returned check charges creates a mismatch between how Kentucky Power incurs expenses and how it recovers those expenses from customers. Instead of reflecting fixed costs in special nonrecurring charges that a utility incurs regardless of the number or timing of those nonrecurring services, including those fixed costs in rates for electric service more closely aligns those expenses with the actions that drive them. This approach to ratemaking is entirely consistent with the Commission’s history of ensuring that rates reflect, to a reasonable degree, the principle of cost causation while simultaneously taking into account the health of the utility and the ability of the utility to provide the adequate, efficient and reasonable provision of service.

Based on the information discussed above and using the cost justifications submitted in Case No. 2014-00396, which is the last time Kentucky Power revised its nonrecurring charges, the Commission finds that the following revisions should be made to Kentucky Power’s nonrecurring charges.³²⁷

	<u>Current Charge</u>	<u>Revised Charge</u>
Reconnect for non-payment (regular hours)	\$21.00	\$4.70
Termination or Field Trip	13.00	4.70
Returned Check	18.00	14.65

³²⁷ The Commission is not revising the meter test fee or meter reading check fee. The Commission is also not revising reconnection fees for reconnections that require overtime, as those are outside regular business hours; reconnection fees resulting from fraudulent use or the energy diversion fee, as those relate to instances of theft of service or customer negligence; the temporary service fee as that is based on the installation of temporary service; and the fee charged for work performed on Kentucky Power’s facilities at customer’s request as that is extra work requested by the customer.

Therefore, the Commission reduces the test-year nonrecurring charge revenue by \$359,033 so that Kentucky Power can receive the income through its base rates.³²⁸

Miscellaneous Tariff Changes

Kentucky Power proposed various minor text changes to its tariff. Unless otherwise stated in this Order, the Commission finds that the proposed changes are reasonable and should be approved.

OTHER ISSUES

Vegetation Management

Kentucky Power requested to change the frequency of certain reporting requirements so that all vegetation management reports are filed at the same time annually. Kentucky Power also requested to continue the one-way balancing mechanism first approved in Case No. 2014-00396 and re-approved in Case No. 2017-00179.³²⁹

Regarding its request to consolidate annual reporting dates, Kentucky Power is required to file two annual reports: (1) by October 1, Kentucky Power must file its vegetation management plan for the upcoming year; and (2) by April 1, Kentucky Power

³²⁸ The Commission used the number of occurrences provided in Kentucky Power's Response to Staff's Post-Hearing Request, Item 5, Attachment 1 to calculate the reduction in nonrecurring charge revenue. It should be noted that the number of occurrences of the termination or field trip fee, returned check fee, and meter test fee provided by Kentucky Power did not match the number of occurrences if one took the amount of revenue from each charge divided by the current approved rate. However, the difference in the two-dollar amounts would only be \$1,674, an amount the Commission deems *de minimis*. In addition, in its Response to Staff's Post-Hearing Request, Item 5, Kentucky Power did not provide the number of reconnections based on reconnect fee type. Therefore, the Commission was unable to determine the number of occurrences that occurred outside of regular business hours. However, as it appears that the vast majority of reconnections were during regular business hours based on dividing the amount of revenue by the number of occurrences, the Commission used the number of occurrences provided by Kentucky Power to calculate the nonrecurring charge revenue reduction.

³²⁹ Case No. 2014-00396, June 22, 2015 Order, Appendix A at 11; Case No. 2017-00179, Jan. 18, 2018 Order at 70.

must file a report describing the work performed and expenditures made in the preceding year.³³⁰ Kentucky Power proposed to combine the two reports into a single report filed by April 1 each year. Kentucky Power asserted that filing one report would promote administrative efficiency. None of the parties opposed Kentucky Power's proposal. The Commission agrees with Kentucky Power that combining the two reports into a single report will promote administrative efficiency by allowing Staff to evaluate the previous year's vegetation management plan, which informs the subsequent year's plan, without unduly impacting the timeliness of the information received by the Commission. For this reason, the Commission finds Kentucky Power's proposal reasonable and therefore Kentucky Power's request to combine the two annual vegetation management reports into a single report filed April 1 each year is granted.

Under the one-way balancing mechanism, any annual shortfall or excess in vegetation management O&M expenses that are over the amount in base rates is added to or subtracted from future expenditures until Kentucky-American's next base rate case is filed.³³¹ If Kentucky Power overspends, it will not seek recovery of the costs in a future base-rate proceeding. Through December 31, 2019, Kentucky Power overspent the budgeted amount of \$112,075,362 by \$253,288.³³² The Commission finds that the one-way balancing adjustment should be continued. However, the balancing mechanism should be adjusted with expenditures balanced against the annual projected expenditures

³³⁰ *Id.* at 28.

³³¹ *Id.* at 29, and Exhibit EGP-1 at 9 of 17.

³³² Direct Testimony of Everett G. Phillips (Phillips Direct Testimony), Exhibit EGP-1 at Table 6.

as set forth in the application, with all expenses recorded against the annual budget until Kentucky Power's next base rate application.

The Commission is concerned that while Kentucky Power is spending more on vegetation management, its reported SAIFI and SAIDI numbers are increasing.³³³ While Kentucky Power attributes this to trees located outside Kentucky Power's right-of-way,³³⁴ the Commission cautions Kentucky Power that the Commission will closely analyze the reasonableness of this trend in future rate cases to ensure that the increase in SAIFI and SAIDI is not due to Kentucky Power not sufficiently investing in its system.

Unprotected Excess ADIT for Bill Credit for COVID-19-related Delinquent Accounts

The Commission entered an Order on October 2, 2020, in Case No. 2020-00176³³⁵ denying Kentucky Power's request to apply \$10,798,596 of the unprotected excess ADIT balance for a one-time bill credit for customer delinquencies attributed to the adverse economic impact of COVID-19. From testimony in the case record, it appears that Kentucky Power misunderstood that the Commission's determination, believing that the Commission was deferring a decision on the matter to this proceeding.

To the extent clarification is necessary, the Commission denied Kentucky Power's proposal to accelerate the return of unprotected excess ADIT through a one-time bill credit for delinquent customer accounts because it was not supported by substantial

³³³ Phillips Direct Testimony, EGP-1, at Tables 4-5.

³³⁴ Phillips Direct Testimony at 21-23.

³³⁵ Case No. 2020-00176, *Electronic Application of Kentucky Power Company to Amend the Settlement Agreement Approved in Case No. 2018-00035 to Provide for the One-Time Amortization of Unprotected Accumulated Deferred Federal Income Tax in an Amount Sufficient to Eliminate Customer Delinquencies Greater Than 30 Days as of May 28, 2020* (Ky. PSC Oct. 2, 2020).

evidence.³³⁶ Kentucky Power's plan to return approximately 67.00 percent of the unprotected excess ADIT balance in Case No. 2020-00176 and this proceeding is inconsistent with Kentucky Power's sworn testimony in a previous case that it would face dire financial consequences if the excess ADIT was amortized less than 18 years.³³⁷ The Commission did not make a finding related to the appropriateness of the accelerated amortization period, finding that this proceeding was the best venue to address the financial impact on credit metrics and cash flow arising from any accelerated amortization period. This Commission believes its use of the unprotected excess ADIT as noted in this Order is more reasonable than those proposed by Kentucky Power in this and related matters.

IT IS THEREFORE ORDERED that:

1. The rates and charges proposed by Kentucky Power are denied.
2. The rates and charges for Kentucky Power, as set forth in Appendix C to this Order, are fair, just and reasonable rates for Kentucky Power, and these rates are approved for service rendered on and after January 14, 2021.
3. Kentucky Power's request for a CPCN for AMI metering system is denied
4. Kentucky Power's request for a Grid Modernization Rider is denied.
5. Kentucky Power's request to revise Tariff PPA as discussed herein is approved until the next rate case.
6. Kentucky Power's Decommissioning Rider shall be calculated as described in this Order.

³³⁶ *Id.* at 6.

³³⁷ *Id.*

7. The Decommissioning Rider factor shall be included in the tariff and all future annual updates to the Decommissioning Rider factor shall be submitted through the Commission's electronic Tariff Filing System no later than August 15 to become effective with bills issued in Cycle 1 of the October billing cycle.

8. Kentucky Power's request to implement a Flex Pay Program is denied.

9. Kentucky Power's request for a deviation from 807 KAR 5:006, Section 7(1)(a) is denied as moot.

10. Kentucky Power's Tariff SSC shall be modified as described in this Order.

11. The Tariff SSC factor shall be included in the tariff and all future annual updates to the Tariff SSC factor shall be submitted through the Commission's electronic Tariff Filing System no later than August 15 to become effective with bills issued in Cycle 1 of the October billing cycle.

12. Kentucky Power's request to implement Rider D.R.S. is approved.

13. Kentucky Power's request to defer the interruptible credits paid to Rider D.R.S. customers and recover the combined amount of Rider D.R.S. and Tariff C.S. - I.R.P. credits above the test year level of Tariff C.S. - I.R.P. credits in the PPA tariff revenue requirement is approved.

14. Kentucky Power's request to revise its Residential, General, and Large General Service Tariff to include the electric vehicle charging provision is approved.

15. Kentucky Power's request to revise its Outdoor Lighting and Street Lighting Tariff as discussed herein is approved as modified herein.

16. Kentucky Power's request to revise Tariff E.D.R. as discussed herein is approved.

17. Kentucky Power's request to revise Tariff F.A.C. as discussed herein is denied.

18. Kentucky Power's request to revise Tariff C.S.-I.R.P. as discussed herein is approved.

19. Kentucky Power's request to revise the Underground Service section of its tariff as discussed herein is denied.

20. Kentucky Power's request to revise Tariff N.U.G. as discussed herein is denied.

21. Kentucky Power's request to revise Tariff COGEN/SPP I and Tariff COGEN/SPP II is denied and these tariffs shall be modified as described in this Order.

22. Kentucky Power's request to revise the Equal Payment Plan section of its tariff as discussed herein is approved.

23. Kentucky Power's request to allow customers to verbally request a meter test is denied.

24. Kentucky Power's request to revise its Franchise Tariff as discussed herein is denied.

25. Kentucky Power's request to add its delayed payment charge to Tariff T.S. and Tariff M.W. is approved.

26. Kentucky Power's request to revise the Availability of Service section of multiple rate schedules to change the requirements from normal maximum demand to average maximum demand is approved.

27. Kentucky Power shall discontinue charging a delayed payment charge to residential customers.

28. The Commission shall defer a decision regarding Tariff NMS I and II to allow Commission Staff to work with its consultant to ensure that there is sufficient evidence to support the conclusion that Kentucky Power's proposed Tariff NMS II rates are fair, just and reasonable.

29. Within 15 days of the date of entry of this Order, Kentucky Power shall file written notice with the Commission if it intends to place Tariff NMS II into effect as of January 14, 2021. If Kentucky Power places Tariff NMS II into effect, Kentucky Power shall maintain its records in a manner as will enable Kentucky Power, or the Commission or any of Kentucky Power's customers, to determine the amounts to be refunded and to whom due in the event a refund is ordered.

30. Except for the tariffs that have been modified, denied, or deferred herein, Kentucky Power's proposed tariffs are approved as filed.

31. Kentucky Power's vegetation management plan, as set forth in the application, is approved.

32. Kentucky Power's request to file a single vegetation management report annually on April 1 is granted. The report shall include the upcoming year vegetation management plan and the previous year vegetation management progress and expenses.

33. Kentucky Power shall file an annual update of the FRR/RPM election analysis conducted by AEP and its operating companies within 30 days of notifying PJM of the election.

34. Kentucky Power shall file annually the supporting calculations for allocating PJM bills, which are based on a one-coincident peak methodology, AEP's operating companies using a twelve-coincident-peak methodology.

35. Within 15 days of the date of entry of this order, Kentucky Power shall provide written notice to the Commission, by letter from Kentucky Power's President and Chief Operating Officer, Brett Mattison, whether it will voluntarily forego all or a portion of the Capacity Charge for the remainder of the term of the UPA.

36. Kentucky Power shall file all documents filed pursuant to ordering paragraphs 29, 32, 33, 34, and 35 in this proceeding's post-case correspondence file.

37. Within 20 days of the date of this Order, Kentucky Power shall file with the Commission, using the Commission's electronic Tariff Filing System, new tariff sheets setting forth the rates, charges, and modifications approved or as required herein and reflecting their effective date and that they were authorized by this Order.

38. This case shall remain open pending a final determination regarding Tariffs NMS I and NMS II.

By the Commission

ENTERED
JAN 13 2021
KENTUCKY PUBLIC SERVICE COMMISSION ^{bsb}

ATTEST:


Linda C. Rudwell
Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2020-00174 DATED JAN 13 2021

Kentucky Power Company
Case No. 2020-00174
Base Revenue Requirement
Summary of Adjustments
For the Test Year Ended March 31, 2020

	<u>Adjustment Amount</u>	<u>Rate Base Change</u>	<u>WACC</u>
Kentucky Power Requested Increase			
Request Based On Original Filing	\$ 70,096,743		
Effects on Increase from Rate Base Recommendations			
Utilize Rate Base Instead of Capitalization to Reflect Return on Component for Base Rates	608,162	7,488,735	8.12103%
Reduce Cash Working Capital to '0' in Lieu of Lead/Lag Study	(1,660,444)	(20,446,234)	8.12103%
Remove Prepaid Pension and Prepaid OPEB from Rate Base, Net of ADIT	(5,203,831)	(64,078,478)	8.12103%
Remove Accounts Payable Balances from CWIP in Rate Base	(687,079)	(8,460,497)	8.12103%
Remove Accounts Payable Balances from Prepayments in Rate Base	(6,784)	(83,533)	8.12103%
		<u>Expense Amount</u>	<u>GRCF</u>
Effects on Increase from Operating Income Recommendations			
Increase to Revenue Due to Removal of Certain Non-Recurring Charges	2,817,345		
Addition of Pension and OPEB Expense Originally Removed from Cost of Service	3,712,668	3,690,184	1.0060929
Reduction of Savings Plan Contribution Expense	(1,684,045)	1,673,846	1.0060929
Adjustment to Rate Case Expense	(418,069)	(415,537)	1.0060929
Remove Incentive Compensation Expense Tied to Financial Performance	(5,665,765)	(5,631,453)	1.0060929
Remove SERP Expense	(205,475)	(204,230)	1.0060929
Remove Miscellaneous Expense Less EEI Dues for Covered Activities	(545,012)	(541,711)	1.0060929
Remove Kentucky Power's Pro Forma Adjustment to Restate Rockport UPA Operating Ratio	(1,705,844)	(1,695,513)	1.0060929
Correct Allocation of Rockport UPA Deferral to Non-jurisdictional Customers	(211,280)	(210,000)	1.0060929
Remove SSC GreenHat Default Charges from FAC Base Rates	(16,552)	(16,452)	1.0060929
Effects on Increase from Rate of Return Recommendations			
Reduce Long Term Debt Rate to Reflect Refinance of June 2021 Maturity	(1,057,851)		
Reduce Return on Equity from 10.0% to 9.3%	(5,511,493)		
Reduce Return on Equity for Environmental Surcharge to 9.1%	(236,063)		
Total Adjustments to Company's Proposed TY Base RR	(17,677,411)		
Base Rate Increase After Adjustments	<u>\$ 52,419,332</u>		

I. Kentucky Power Cost of Capital Per Filing

	Capital Amount	Capital Ratio	Component Costs	Weighted Avg Cost	Grossed Up Cost
Short Term Debt	-	0.00%	2.23%	0.00%	0.00%
Long Term Debt	752,127,351	53.73%	4.04%	2.17%	2.18%
Accounts Receivable Financing	42,248,832	3.02%	2.80%	0.09%	0.09%
Common Equity	605,509,950	43.25%	10.00%	4.33%	5.85%
Total Capital	1,399,886,133	100.0%		6.58%	8.12%

II. Cost of Capital Adjusted to Reflect Updated Debt Rates

	Capital Amount	Capital Ratio	Component Costs	Weighted Avg Cost	Grossed Up Cost
Short Term Debt	-	0.00%	1.71%	0.00%	0.00%
Long Term Debt	752,127,351	53.73%	3.89%	2.09%	2.10%
Accounts Receivable Financing	42,248,832	3.02%	2.80%	0.08%	0.08%
Common Equity	605,509,950	43.25%	10.00%	4.33%	5.86%
Total Capital	1,399,886,133	100.0%		6.50%	8.04%
Change in Grossed Up Weighted Avg Cost of Capital					-0.08%
Rate Base Calculated by Commission					1,314,306,226
Revenue Requirement Effect of Adjustment					<u>\$ (1,057,851)</u>

II. Cost of Capital Adjusted to Reflect Lower ROE

	Capital Amount	Capital Ratio	Component Costs	Weighted Avg Cost	Grossed Up Cost
Short Term Debt	-	0.00%	1.71%	0.00%	0.00%
Long Term Debt	752,127,351	53.73%	3.89%	2.09%	2.10%
Accounts Receivable Financing	42,248,832	3.02%	2.80%	0.08%	0.08%
Common Equity	605,509,950	43.25%	9.30%	4.02%	5.44%
Total Capital	1,399,886,133	100.0%		6.19%	7.62%
Change in Grossed Up Weighted Avg Cost of Capital					-0.42%
Rate Base Calculated by Commission					1,314,306,226
Revenue Requirement Effect of Adjustment					<u>\$ (5,511,493)</u>

III. Cost of Capital Adjusted to Reflect Lower ROE for Environmental Surcharge

	Capital Amount	Capital Ratio	Component Costs	Weighted Avg Cost	Grossed Up Cost
Short Term Debt	-	0.00%	1.71%	0.00%	0.00%
Long Term Debt	752,127,351	53.73%	3.89%	2.09%	2.10%
Accounts Receivable Financing	42,248,832	3.02%	2.80%	0.08%	0.08%
Common Equity	605,509,950	43.25%	9.10%	3.94%	5.32%
Total Capital	1,399,886,133	100.0%		6.11%	7.50%
Change in Grossed Up Weighted Avg Cost of Capital					-0.11%
Environmental Surcharge Rate Base Calculated by Commission					218,135,633
Revenue Requirement Effect of Adjustment					<u>\$ (236,063)</u>

		Annual Total Rate Credits		
		2021	2022	2023
Residential Class	$j = f^*(g/i)$	\$ (18,785,066)	\$ (18,785,066)	\$ (18,785,066)
All Other	$k = f^*(h/i)$	\$ (21,110,947)	\$ (21,110,947)	\$ (21,110,947)
Total		\$ (39,896,013)	\$ (39,896,013)	\$ (39,896,013)

		Annual kWh***			
Residential Class kWh		1,992,407,328			
All Other kWh		3,142,308,667	$= k/\text{Annual kWh}$	(0.006718)	(0.006718)
Total		5,134,715,995			

		2021 Seasonal Collection	2021 Seasonal Res Rate	
Residential Class kWh - Winter (Dec-Mar)	804,785,553	$=l*n$ (17,597,444)	\$ (0.021866)	$= (j - (\text{Apr-Nov kWh} * -.001)) / \text{Dec-Mar kWh}$
Residential Class kWh - All Other (Apr-Nov)	1,187,621,775	$=l*m$ (1,187,622)	\$ (0.001000)	
Total	1,992,407,328	\$ (18,785,066)		

		2022 Seasonal Collection	2022 Seasonal Res Rate	
Residential Class kWh - Winter (Dec-Mar)	804,785,553	(17,597,444)	\$ (0.021866)	$= (j - (\text{Apr-Nov kWh} * -.001)) / \text{Dec-Mar kWh}$
Residential Class kWh - All Other (Apr-Nov)	1,187,621,775	(1,187,622)	\$ (0.001000)	
Total	1,992,407,328	\$ (18,785,066)		

		2023 Seasonal Collection	2023 Seasonal Res Rate	
Residential Class kWh - Winter (Dec-Mar)	804,785,553	(17,597,444)	\$ (0.021866)	$= (j - (\text{Apr-Nov kWh} * -.001)) / \text{Dec-Mar kWh}$
Residential Class kWh - All Other (Apr-Nov)	1,187,621,775	(1,187,622)	\$ (0.001000)	
Total	1,992,407,328	\$ (18,785,066)		

**KPCO_R_KPSC_2_16_attachment2_BA.xlsx

APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2020-00174 DATED JAN 13 2021

The following rates and charges are prescribed for the customers in the area served by Kentucky Power Company. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of this Commission prior to the effective date of this Order.

TARIFF R.S.
RESIDENTIAL SERVICE

Service Charge per month	\$	17.50
Energy Charge per kWh	\$	.11032
Storage Water Heating Provision - Per kWh	\$	.08125
Load Management Water Heating Provision - Per kWh	\$	.08125
Electric Vehicle Energy Charge		
All kWh used during on-peak billing period	\$	.14760
All kWh used during off-peak billing period	\$	.08125

TARIFF R.S.-L.M.-T.O.D.
RESIDENTIAL SERVICE LOAD MANAGEMENT TIME-OF-DAY

Service Charge per month	\$	21.00
Energy Charge per kWh:		
All kWh used during on-peak billing period	\$	.14760
All kWh used during off-peak billing period	\$	.08125
Separate Metering Provision Per Month	\$	4.30

TARIFF R.S.-T.O.D.
RESIDENTIAL SERVICE TIME-OF-DAY

Service Charge per month	\$	21.00
Energy Charge per kWh:		
All kWh used during on-peak billing period	\$	.14760
All kWh used during off-peak billing period	\$	.08125

TARIFF R.S.-T.O.D. 2
EXPERIMENTAL RESIDENTIAL SERVICE TIME-OF-DAY 2

Service Charge per month	\$	21.00
Energy Charge per kWh:		

All kWh used during summer on-peak billing period	\$	.19082
All kWh used during winter on-peak billing period	\$	.16585
All kWh used during off-peak billing period	\$	.09318

TARIFF R.S.D.
RESIDENTIAL DEMAND-METERED ELECTRIC SERVICE

Service Charge per month	\$	21.00
Energy Charge per kWh:		
All kWh used during on-peak billing period	\$	.12556
All kWh used during off-peak billing period	\$	.08125
Demand Charge per kW	\$	3.90

TARIFF G.S.
GENERAL SERVICE

Secondary Service:

Service Charge per month	\$	25.00
Energy Charge per kWh:		
First 4,450 kWh per month	\$	.11146
Over 4,450 kWh per month	\$	.10440
Demand Charge per kW greater than 10 kW	\$	6.59

Primary Service:

Service Charge per month	\$	100.00
Energy Charge per kWh:		
First 4,450 kWh per month	\$	.09813
Over 4,450 kWh per month	\$	.09232
Demand Charge per kW greater than 10 kW	\$	5.99

Subtransmission Service:

Service Charge per month	\$	400.00
Energy Charge per kWh:		
First 4,450 kWh per month	\$	.08902
Over 4,450 kWh per month	\$	.08380
Demand Charge per kW greater than 10 kW	\$	4.66

TARIFF G.S.
GENERAL SERVICE
RECREATIONAL LIGHTING SERVICE PROVISION

Service Charge per month	\$	25.00
Energy Charge per kWh	\$	.11071

TARIFF G.S.
GENERAL SERVICE
LOAD MANAGEMENT TIME-OF-DAY PROVISION

Service Charge per month	\$ 25.00
Energy Charge per kWh:	
All kWh used during on-peak billing period	\$.16137
All kWh used during off-peak billing period	\$.08153

TARIFF G.S.
GENERAL SERVICE
OPTIONAL UNMETERED SERVICE PROVISION

Service Charge per month	\$ 15.00
Energy Charge per kWh:	
First 4,450 kWh per month	\$.11146
Over 4,450 kWh per month	\$.10440

TARIFF S.G.S.-T.O.D.
SMALL GENERAL SERVICE TIME-OF-DAY

Service Charge per month	\$ 25.00
Energy Charge per kWh:	
All kWh used during summer on-peak billing period	\$.21080
All kWh used during winter on-peak billing period	\$.18406
All kWh used during off-peak billing period	\$.11513

TARIFF M.G.S.-T.O.D.
MEDIUM GENERAL SERVICE TIME-OF-DAY

Service Charge per month	\$ 25.00
Energy Charge per kWh:	
All kWh used during on-peak billing period	\$.16137
All kWh used during off-peak billing period	\$.08153

TARIFF L.G.S.
LARGE GENERAL SERVICE

<u>Secondary Service Voltage:</u>	
Service Charge per month	\$ 85.00
Energy Charge per kWh	\$.08665
Demand Charge per kW	\$ 8.77

<u>Primary Service Voltage:</u>	
Service Charge per month	\$ 127.50
Energy Charge per kWh	\$.07588
Demand Charge per kW	\$ 7.90

<u>Sub-transmission Service Voltage:</u>	
Service Charge per month	\$ 660.00
Energy Charge per kWh	\$.05540
Demand Charge per kW	\$ 6.61

<u>Transmission Service Voltage:</u>	
Service Charge per month	\$ 660.00
Energy Charge per kWh	\$.05321
Demand Charge per kW	\$ 6.16

<u>All Service Voltages:</u>	
Excess Reactive Charge per KVA	\$ 3.46

TARIFF L.G.S.
LARGE GENERAL SERVICE
LOAD MANAGEMENT TIME-OF-DAY PROVISION

Service Charge per month	\$ 85.00
Energy Charge per kWh:	
All kWh used during on-peak billing period	\$.14657
All kWh used during off-peak billing period	\$.08125

TARIFF L.G.S. – T.O.D.
LARGE GENERAL SERVICE TIME-OF-DAY

<u>Secondary Service Voltage:</u>	
Service Charge per month	\$ 85.00
Energy Charge:	
On-Peak Energy Charge per kWh	\$.10515
Off-Peak Energy Charge per kWh	\$.05598
Demand Charge per kW	\$ 10.92

<u>Primary Service Voltage:</u>	
Service Charge per month	\$ 127.50
Energy Charge:	
On-Peak Energy Charge per kWh	\$.10363
Off-Peak Energy Charge per kWh	\$.05556
Demand Charge per kW	\$ 8.17

<u>Sub-transmission Service Voltage:</u>	
Service Charge per month	\$ 660.00
Energy Charge:	
On-Peak Energy Charge per kWh	\$.10286
Off-Peak Energy Charge per kWh	\$.05530
Demand Charge per kW	\$ 1.77

<u>Transmission Service Voltage:</u>	
Service Charge per month	\$ 660.00
Energy Charge:	
On-Peak Energy Charge per kWh	\$.10200
Off-Peak Energy Charge per kWh	\$.05505
Demand Charge per kW	\$ 1.75
 <u>All Service Voltages:</u>	
Excess Reactive Charge per KVA	\$ 3.46

TARIFF I.G.S.
INDUSTRIAL GENERAL SERVICE

<u>Secondary Service Voltage:</u>	
Service Charge per month	\$ 276.00
Energy Charge per kWh	\$.02937
Demand Charge per kW	
Of Monthly On-Peak Billing Demand	\$ 25.86
Of Monthly Off-Peak Billing Demand	\$ 1.80

<u>Primary Service Voltage:</u>	
Service Charge per month	\$ 276.00
Energy Charge per kWh	\$.02899
Demand Charge per kW	
Of Monthly On-Peak Billing Demand	\$ 22.94
Of Monthly Off-Peak Billing Demand	\$ 1.78

<u>Sub-transmission Service Voltage:</u>	
Service Charge per month	\$ 794.00
Energy Charge per kWh	\$.02874
Demand Charge per kW	
Of Monthly On-Peak Billing Demand	\$ 16.31
Of Monthly Off-Peak Billing Demand	\$ 1.76

<u>Transmission Service Voltage:</u>	
Service Charge per month	\$1,353.00
Energy Charge per kWh	\$.02851
Demand Charge per kW	
Of Monthly On-Peak Billing Demand	\$ 16.06
Of Monthly Off-Peak Billing Demand	\$ 1.75

All Service Voltages:
Reactive demand charge for each kilovar of maximum leading or lagging reactive demand in excess of 50 percent of the kW of monthly metered demand is \$.69 per KVAR.

Minimum Demand Charge

The minimum demand charge shall be equal to the minimum billing demand times the following minimum demand rates per kW:

Secondary	\$ 28.76
Primary	\$ 25.80
Subtransmission	\$ 19.16
Transmission	\$ 18.87

TARIFF M.W.
MUNICIPAL WATERWORKS

Service Charge per month	\$ 25.00
Energy Charge - All kWh per kWh	\$.10035

Subject to a minimum monthly charge equal to the sum of the service charge plus \$9.78 per kW as determined from customer's total connected load.

TARIFF O.L.
OUTDOOR LIGHTING

OVERHEAD LIGHTING SERVICE

High Pressure Sodium per Lamp:	
100 Watts (9,500 Lumens)	\$ 9.05
150 Watts (16,000 Lumens)	\$ 10.35
200 Watts (22,000 Lumens)	\$ 12.45
250 Watts (28,000 Lumens)	\$ 17.85
400 Watts (50,000 Lumens)	\$ 19.75
Mercury Vapor per Lamp:	
175 Watts (7,000 Lumens)	\$ 11.55
400 Watts (20,000 Lumens)	\$ 19.85
LED:	
55 Watts (5,400 Lumens)	\$ 6.62
100 Watts (10,500 Lumens)	\$ 9.20
175 Watts (18,430 Lumens)	\$ 11.62
300 Watts (30,230 Lumens)	\$ 17.94

POST-TOP LIGHTING SERVICE

High Pressure Sodium per Lamp:	
100 Watts (9,500 Lumens)	\$ 16.40
150 Watts (16,000 Lumens)	\$ 25.80
100 Watts Shoe Box (9,500 Lumens)	\$ 30.00
250 Watts Shoe Box (28,000 Lumens)	\$ 30.05
400 Watts Shoe Box (50,000 Lumens)	\$ 39.45
Mercury Vapor per Lamp:	

LED:	175 Watts (7,000 Lumens)	\$ 13.25
	65 Watts Post Top (7,230 Lumens)	\$ 19.05

FLOOD LIGHTING SERVICE

High Pressure Sodium per Lamp:		
	200 Watts (22,000 Lumens)	\$ 14.30
	400 Watts (50,000 Lumens)	\$ 21.00
Metal Halide		
	250 Watts (20,500 Lumens)	\$ 17.45
	400 Watts (36,000 Lumens)	\$ 22.00
	1,000 Watts (110,000 Lumens)	\$ 40.00
	250 Watts Mongoose (19,000 Lumens)	\$ 22.75
	400 Watts Mongoose (40,000 Lumens)	\$ 27.75
LED:		
	175 Watt Flood	\$ 24.75
	265 Watt Flood	\$ 30.40

Per Month:		
	Wood Pole	\$ 3.60
	Overhead Wire Span not over 150 Feet	\$ 2.00
	Underground Wire Lateral not over 50 Feet	\$ 6.75

Per Lamp plus \$0.02851 x kWh in Sheet No. 14-5 in Company's tariff

LED Conversion Charge for 84 months: \$3.33/month

Flexible Lighting		
	Monthly Levelized Fixed Cost Rate	1.36%
	Monthly Maintenance charge	\$.80
	Monthly non-fuel charge per kWh	\$.05517
	Monthly Base Fuel Charge per kWh	\$.02851

TARIFF S.L.
STREET LIGHTING

Rate per Lamp:		
Overhead Service on Existing Distribution Poles		
High Pressure Sodium		
	100 Watts (9,500 Lumens)	\$ 7.60
	150 Watts (16,000 Lumens)	\$ 8.35
	200 Watts (22,000 Lumens)	\$ 9.90
	400 Watts (50,000 Lumens)	\$ 13.00

LED	
55 Watt (5,400 Lumens)	\$ 8.71
100 Watt (10,500 Lumens)	\$ 11.19
175 Watt (18,430 Lumens)	\$ 13.34
65 Watt Post Top (7,230 Lumens)	\$ 9.05
90 Watt Dec Post Top (7,038 Lumens)	\$ 20.07
175 Watt Flood (21,962 Lumens)	\$ 14.69
Service on New Wood Distribution Poles	
High Pressure Sodium	
100 Watts (9,500 Lumens)	\$ 11.90
150 Watts (16,000 Lumens)	\$ 12.75
200 Watts (22,000 Lumens)	\$ 14.30
400 Watts (50,000 Lumens)	\$ 18.35
LED	
55 Watt (5,400 Lumens)	\$ 14.36
100 Watt (10,500 Lumens)	\$ 16.85
175 Watt (18,430 Lumens)	\$ 19.00
65 Watt Post Top (7,230 Lumens)	\$ 14.70
90 Watt Post Top (7,038 Lumens)	\$ 25.73
175 Watt Flood (21,962 Lumens)	\$ 20.35
Service on New Metal or Concrete Poles	
High Pressure Sodium	
100 Watts (9,500 Lumens)	\$ 24.80
150 Watts (16,000 Lumens)	\$ 25.70
200 Watts (22,000 Lumens)	\$ 27.25
400 Watts (50,000 Lumens)	\$ 30.35
LED	
55 Watt (5,400 Lumens)	\$ 25.10
100 Watt (10,500 Lumens)	\$ 26.78
175 Watt (18,430 Lumens)	\$ 28.11
65 Watt Post Top (7,230 Lumens)	\$ 25.85
90 Watt Post Top (7,038 Lumens)	\$ 36.74
175 Watt Flood (21,962 Lumens)	\$ 29.42

Per Lamp plus \$0.02851 x kWh in Sheet No. 14-5 in Company's tariff

LED Conversion Charge for 84 months: \$2.18/month

Flexible Lighting

Monthly Levelized Fixed Cost Rate	0.97%
Monthly Maintenance charge	\$ 2.52
Monthly non-fuel charge per kWh	\$.04391
Monthly Base Fuel Charge per kWh	\$.02851

TARIFF COGEN/SPP I
COGENERATION AND/OR SMALL POWER PRODUCTION
100 KW OR LESS

Monthly Metering Charges:

Single Phase:

Standard Measurement	\$ 9.25
Time-of-Day Measurement	\$ 9.85

Polyphase:

Standard Measurement	\$ 12.10
Time-of-Day Measurement	\$ 12.40

Energy Credit per kWh: variable LMP at time of delivery

Capacity Credit per kW per month: Area 3 Combustion Turbine Cone

2020/2021	\$ 6.74
2021/2022	\$ 8.09
2022/2023	\$ 7.89

TARIFF COGEN/SPP II
COGENERATION AND/OR SMALL POWER PRODUCTION
OVER 100 KW

Metering Charges:

Single Phase:

Standard Measurement	\$ 9.25
Time-of-Day Measurement	\$ 9.85

Polyphase:

Standard Measurement	\$ 12.10
Time-of-Day Measurement	\$ 12.40

Energy Credit per kWh: variable LMP at time of delivery

Capacity Credit per kW per month: Area 3 Combustion Turbine Cone

2020/2021	\$ 6.74
2021/2022	\$ 8.09
2022/2023	\$ 7.89

RIDER A.F.S.
ALTERNATE FEED SERVICE RIDER

Monthly Rate for Annual Test of Transfer Switch/Control Module	\$ 15.75
Monthly Capacity Reservation Demand Charge per kW	\$ 6.38

RIDER D.R.S.
DEMAND RESPONSE SERVICES

Monthly Interruptible Demand Credit per kW	\$ 5.50
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TARIFF F.T.C.
FEDERAL TAX CUT

January–March and December per kWh	
Residential	\$.02187
Nonresidential	\$.00672

April – November per kWh	
Residential	\$.00010
Nonresidential	\$.00672

NONRECURRING CHARGES

Late or Delayed Payment Charge	
Residential	0.00%
Nonresidential	5.00%
Reconnect (nonpayment during regular hours)	\$ 4.70
Termination or field trip	\$ 4.70
Returned Check Charge	\$ 14.65

APPENDIX D

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2020-00174 DATED JAN 13 2021

MONTHLY BASE PERIOD REVENUE REQUIREMENT

<u>Billing Month</u>	<u>Base Period Cost</u>
January	\$3,493,276
February	\$3,951,504
March	\$3,685,712
April	\$4,642,912
May	\$4,466,812
June	\$3,887,300
July	\$4,122,547
August	\$3,923,098
September	\$3,678,077
October	\$3,765,621
November	\$3,806,802
December	<u>\$3,804,411</u>
	\$47,228,073

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